



January 5, 2004

Mr. Kevin Turner
On-Scene Coordinator
U.S. Environmental Protection Agency Region 5
77 West Jackson Boulevard
Chicago, IL 60604

**Subject: Removal Action Report
Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois
EPA Contract No. 68-W-00-129
TDD No. S05-0104-010**

Dear Mr. Turner:

The Tetra Tech EM Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START) is submitting this final Removal Action report generated for the Dead Creek site located in Sauget, Illinois. This report summarizes field activities conducted at the site during the response activities.

If you have any questions about the enclosed report, please call me at (314) 892-6322 or Tom Kouris at (312) 856-8700.

Sincerely,

Ronald A. Carroll
START Project Manager

Enclosure

cc: Lorraine Kosik, U.S. EPA START Project Officer
Tom Kouris, Tetra Tech START Program Manager
START File

REMOVAL ACTION REPORT
DEAD CREEK SEDIMENT REMOVAL
SAUGET, ST. CLAIR COUNTY, ILLINOIS

Prepared for
U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 5
Chicago, IL 60604

Contract No.: 68-W-00-129
TDD No.: S05-0104-010
Date Prepared: January 5, 2004
EPA Work Task Monitor : Mr. Kevin Turner
Telephone No.: (618) 997-0115
Prepared by: Tetra Tech EM Inc.
START Project Manager: Ronald A. Carroll
Telephone No.: (314) 892-6322

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**REMOVAL ACTION REPORT
DEAD CREEK SEDIMENT REMOVAL
SAUGET, ST. CLAIR COUNTY, ILLINOIS**

1.0 INTRODUCTION

This report has been prepared under the provisions of Technical Direction Document (TDD) No. S05-0104-010, which the U.S. Environmental Protection Agency Region 5 (U.S. EPA) assigned to the Tetra Tech EM Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START) under Contract No. 68-W-00-129. The overall scope of this TDD, monitored by On-Scene Coordinator (OSC) Mr. Kevin Turner, was to provide oversight during the removal activities. Specific elements of this TDD included documenting on-site conditions and activities with logbook notes (Appendix A) and photographs (Appendix B), and preparing a final report.

2.0 SITE BACKGROUND

The Dead Creek site is located within Sauget and Cahokia, Illinois, roughly between Illinois Highway 3 and Falling Springs Road. The creek starts at Queeny Avenue, flows past Illinois Highway 157, and empties into the Old Prairie du Pont Creek, which is a tributary to the Mississippi River. The site is bordered to the north by the Solutia industrial site as well as several other industrial sites; to the east and west by residential or commercial property; and to the south by a park, wetlands and primarily undeveloped property.

In 1928, an easement agreement was executed between local property owners and representatives for other interests to improve drainage in the area and make Dead Creek suitable for the disposal of various waters. As a result, Dead Creek received discharges from local businesses and the Village of Sauget for many years. Prior to the installation of public sewers in the Village of Sauget in the early 1930s, industrial process wastewater from Sauget and East St. Louis flowed directly into Dead Creek. Six source areas believed to contain greater than 400,000 cubic yards of waste from various sources were located within Dead Creek's headwaters. These source areas were described as two closed municipal/industrial landfills, a closed disposal area that was covered by the U.S. EPA in 1995, a backfilled wastewater impoundment, a former borrow pit, and a backfilled borrow pit.

The Illinois Environmental Protection Agency (IEPA) divided Dead Creek into six segments (A-F) during a 1988 investigation. Segment A is not part of the removal. Segment B extends south from Queeny Avenue to Judith Lane. The culvert at Judith Lane was blocked in 1965 to prevent water from flowing downstream. Site M, which was not part of the IEPA division of Dead Creek in 1988, is located along the eastern side of Dead Creek at the western end of Walnut Street. In the 1940s, Site M was constructed as a sand borrow pit and contained approximately 3,600 cubic yards of contaminated sediment. Creek Segment C extends south from Judith Lane to Cahokia Street. Segment D runs south from Cahokia Street to Jerome Lane. Creek Segment E runs south from Jerome Lane to Illinois Highway 157. Segment F extends from Highway 157 to Old Prairie du Pont Creek. Segment F is the widest portion of Dead Creek. Samples of water and sediment from Creek Segments B-F and Site M collected in the 1980s, 1990s and 2000 indicated the presence of a variety of organic and inorganic constituents.

It was determined that the contaminated sediment from the creek created a hazardous situation for the residents living near the site. A variety of organic and inorganic constituents were found in the water and sediment tested from Dead Creek and Site M. The list of constituents consisted of 39 semivolatile organic compounds, 10 volatile organic compounds (VOC), 20 metals, and polychlorinated biphenyls (PCB). The number of, as well as the concentrations of the constituents, were generally higher in the northern portions of Dead Creek. Barium, copper, lead, nickel, and zinc were found in all segments of the creek at levels greater than 100 parts per million (ppm). PCBs were also found in all segments at levels greater than 1 ppm. Sediment toxicity was observed in all but the most southern segment of Dead Creek.

Work began on the site in November 2000 with preparations for installing the creek bypass system, which consisted of a 12-inch pipe running the length of Dead Creek. To install the pipe, it was necessary to excavate through streets and place culverts under them. The sections of pipe were put together and pumps and pump stations were installed. Sediment traps were installed in all segments of the creek. This was followed by cleaning the culverts where the creek was covered, then beginning the creek bypass system. After the creek bypass system was operating, brush and debris were removed from the creek, starting with Segment B. Safety fences were installed around the creek from Segment B to near Parks College in Segment E. The debris removed from the creek was then stockpiled. A low-flow channel was dug in Segments D-F to collect the water in the middle of the creek and allow the sediment near the sides of the creek to dry. Near this time, construction of an on-site U.S. EPA-permitted Toxic Substances

Control Act (TSCA) land disposal cell began. Impacted sediment from the channel and banks of Dead Creek was excavated and transported for disposal into the cell. Figure 1 illustrates the approximate location of the site. Figure 2 shows that site layout and the TSCA cell area.

3.0 REMOVAL ACTIVITIES

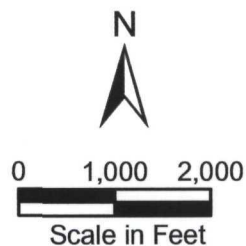
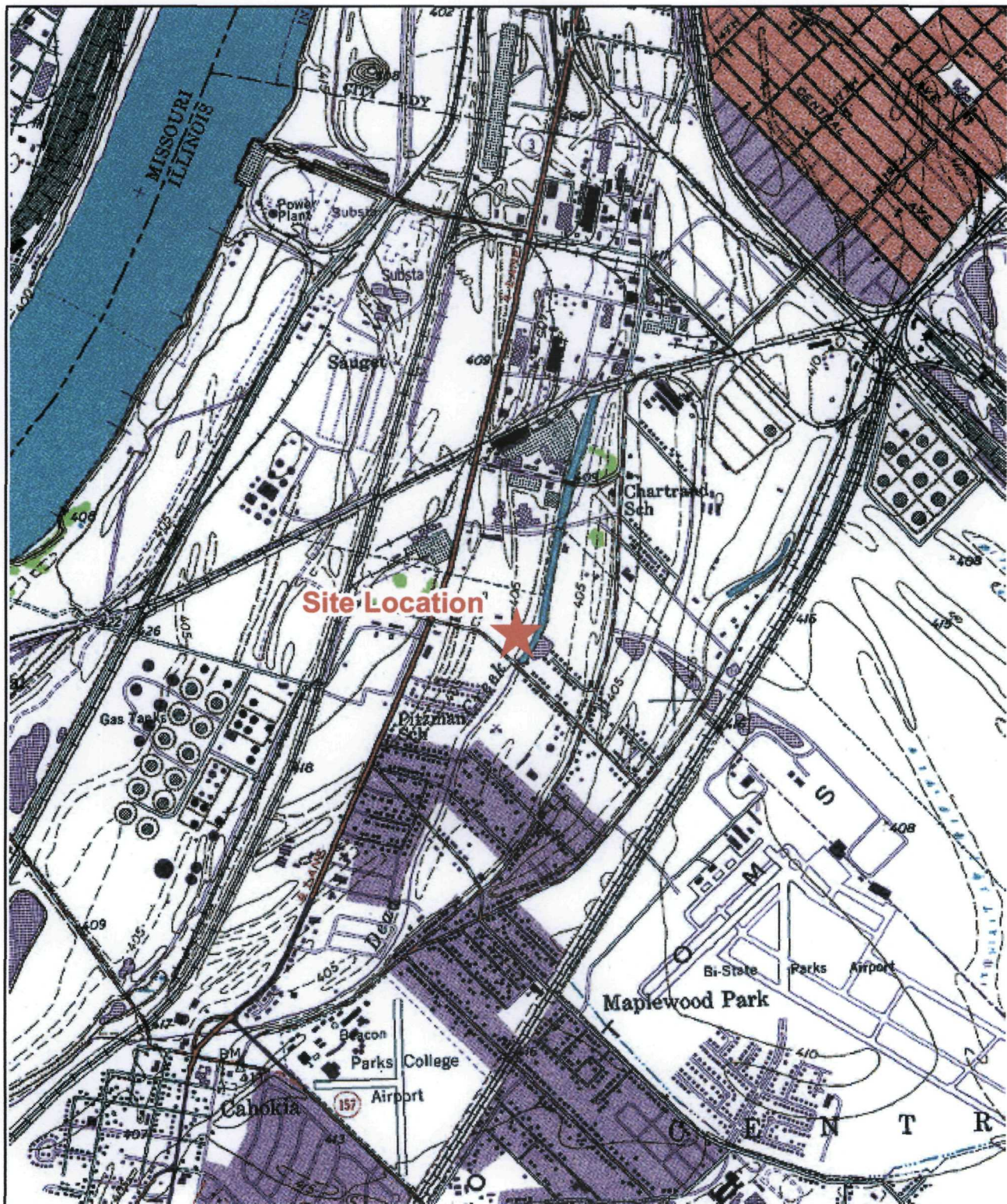
At the request of U.S. EPA, START mobilized to Sauget on April 11, 2001 to begin oversight activities. START employee Arthur Currier met with U.S. EPA OSC Kevin Turner and representatives from the other contractors that would be performing work at the site. These contractors included Maverick Construction Management Services, Inc.; Environmental Restoration LLC; LMS Construction Inc.; URS Corporation; and Golder & Associates.

Material was being removed from Site M by late June 2001 and placed in a designated containment area within Segment B. A carbon treatment system was used to filter the water being pumped from Site M to the downstream Dead Creek channel. By July 16, 2001, all the material had been removed from Site M, which was subsequently prepared for grading.

The walls of the TSCA cell were completed in mid-July 2001 and construction of the liner began by placing rock and gravel in the base. Installation of the secondary liner began on July 26, 2001 and was completed on August 15, 2001. The access ramps to the cell were completed on August 15, 2001. The primary liner was completed on September 6, 2001. Prior to sediment being placed in the cell, a layer of sand was placed in the bottom of the TSCA cell.

During the construction of the TSCA cell liner, Site M was graded and seeded, and the culverts passing under Highway 157 and Highway 3 were cleaned. Sediment from Segments D and E were stockpiled in the Segment B designated containment area. Installation of ten groundwater monitoring wells began on August 20, 2001. Well development continued until September 5, 2001, with the first groundwater monitoring well samples collected on September 19, 2001.

Figure 1



Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

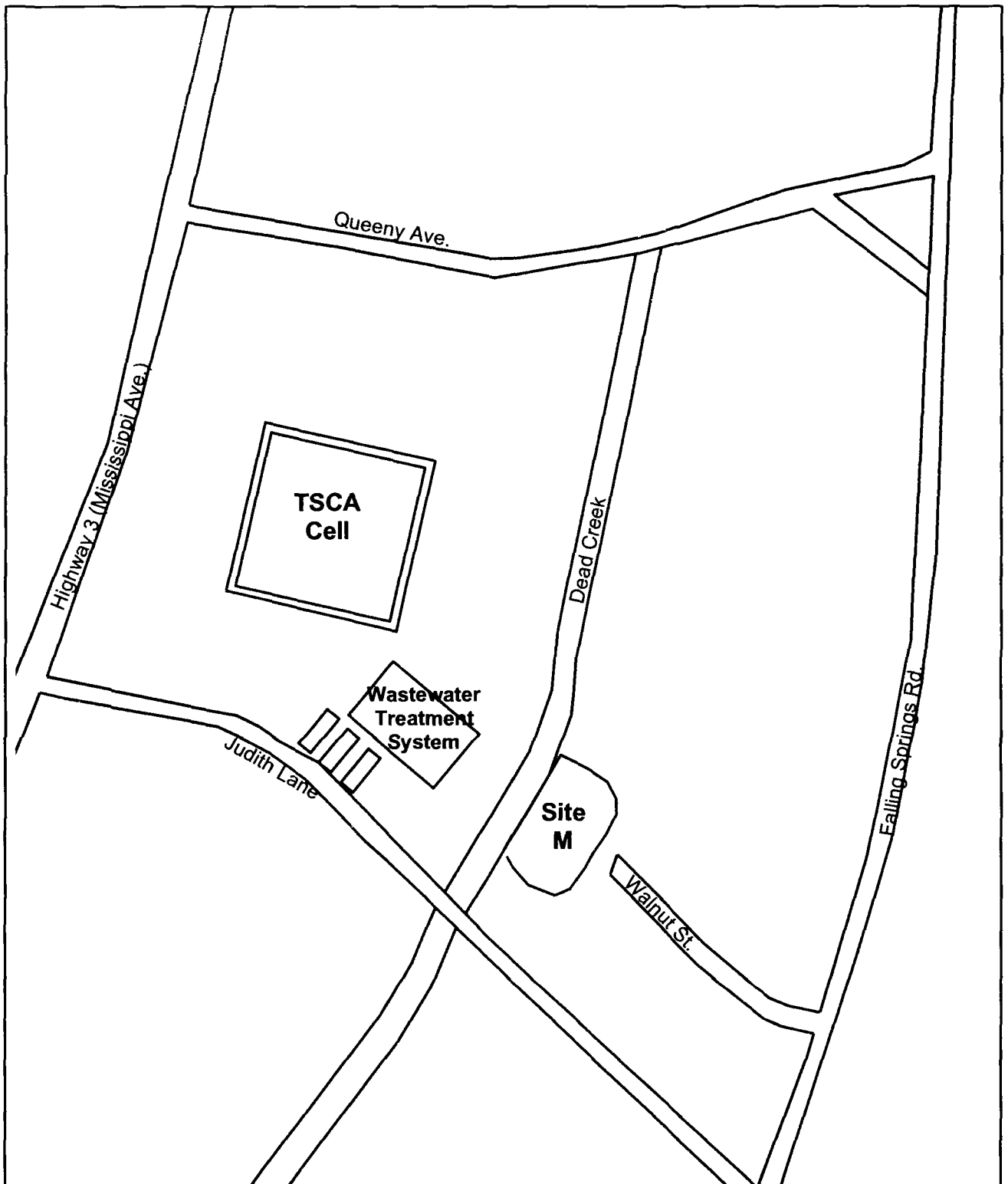
Figure 1
Site Location Map

Tt Tetra Tech EM Inc.

Date: 12/15/03 Drawn By: Michelle Handley Project No: G9009L0104010

Source: USGS Cahokia, IL - MO 7.5 Minute Topo Quad, 1954, Revised 1993

Figure 2



c:\Dead Creek\F_gun2.mxd



Not to Scale

Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Figure 2
Site Layout Map
TSCA Cell Area



Tetra Tech EM Inc.

Date: 12/15/03

Drawn By: Michelle Handley

Project No: G9009L0104010

A wastewater treatment system for the TSCA cell was also installed. It consisted of a collection sump in the northwest corner of the cell and associated piping that ran to a series of settling tanks and carbon filters located near the site trailers.

Screening of the sediment stored in the Segment B containment area to remove objects that might damage the liner began on September 6, 2001. On September 19, 2001, the TSCA cell was completed and the first load of screened sediment from Segment B was placed in the cell on September 20, 2001. Paint filter tests were completed on stockpiles prior to the sediment being placed in the TSCA cell. The removal from Segment B was completed on November 14, 2001. Collection of confirmatory samples of creek sediment began on November 20, 2001.

The sediment removal from Segment D was completed on October 17, 2001. On October 27, 2001, what was believed to be an overflow pipe was found in Segment B near Queeny Avenue. On October 29, 2001 START collected a sample of the discharge from the pipe and tested the headspace for VOCs with a photoionization detector. No VOCs were detected and in early November 2001, an anti-seep collar was placed on the pipe, which was subsequently plugged with concrete on November 8, 2001.

Removal of sediment from Segment C began on November 8, 2001, and was completed on December 4, 2001.

The collection of confirmatory samples of creek sediment from Segments B-E was completed by Solutia's agent on January 25, 2002.

The removal from Segment F began on December 5, 2001, and was completed on February 6, 2002. Subsequent confirmatory samples were collected.

By late February 2002, all sediment had been removed from the creek. A total of approximately 50,384 cubic yards of sediment were placed in the TSCA disposal cell. Placement of the temporary cover on the TSCA cell began on February 28, 2002.

On March 4, 2002, the contaminated sediment removal phase of the project was completed and START was no longer required to monitor site sediment removal activities. The remaining activities to be completed at the site include:

- Demobilization and decontamination of equipment;
- Complete the installation of the temporary cover on the TSCA cell;
- Removal of the de-watering piping system and other equipment from the creek segments;
- Demobilization of the cell wastewater treatment system and establishment of a carbon filtration unit.

4.0 WASTE DISPOSAL

All impacted sediment materials removed from Dead Creek were placed in the on-site TSCA land disposal cell. A total of 50,384 cubic yards of impacted sediment were placed in the TSCA cell. Brush and other debris removed from the creek was placed in the TSCA cell away from the liner. Solid investigation-derived waste was either placed in the cell or disposed of as hazardous materials. Decontamination water was treated by the TSCA cell wastewater treatment system. Solutia's agents were not required to monitor the amount of water that passed through the TSCA cell wastewater treatment system. Therefore, that volume is unknown.

5.0 ANALYTICAL SUMMARY

All samples for analysis, including confirmatory creek sediment samples, groundwater samples, and sediment paint filter samples were collected by agents hired by Solutia. All analytical results were provided to Solutia under their agreement with the U.S. EPA. START did not have access to the results. Moreover, START was not tasked to review post-remedial confirmation sample results collected under the direction of Solutia.

6.0 CONCLUSIONS

The Dead Creek site is located within Sauget and Cahokia, Illinois, roughly between Illinois Highway 3 and Falling Springs Road. The northern boundary starts at Queeny Avenue, flows past Illinois Highway

157, and empties into the Old Prairie du Pont Creek, which is a tributary to the Mississippi River. The site is bordered to the north by the Solutia industrial site as well as several other industrial sites; to the east and west by residential or commercial property; and to the south by a park, wetlands and undeveloped property.

Prior to the installation of public sewers in the Village of Sauget in the early 1930s, industrial process wastewater from Sauget and East St. Louis flowed directly into Dead Creek. Six source areas believed to contain greater than 400,000 cubic yards of waste from various sources were located within Dead Creek's headwaters.

IEPA divided Dead Creek into six segments (A-F) during a 1988 investigation. Samples of water and sediment from Creek Segments B-F and Site M, located along the eastern side of Dead Creek at the western end of Walnut Street, collected in the 1980s, 1990s and 2000 indicated the presence of a variety of organic and inorganic constituents.

It was determined that the contaminated sediment from the creek created a hazardous situation for the residents living near the site. The list of constituents found in the water and sediment tested from Dead Creek and Site M consisted of 39 semivolatile organic compounds, 10 volatile organic compounds, 20 metals, and PCBs. The number of, as well as the concentrations of the constituents, were generally higher in the northern portions of Dead Creek. Barium, copper, lead, nickel, and zinc were found in all segments of the creek at levels greater than 100 ppm. PCB was also found in all segments at levels greater than 1 ppm. Sediment toxicity was observed in all but the most southern segment of Dead Creek.

Work began on the site in November 2000 with preparations for installing the creek bypass system running the length of Dead Creek. Sediment traps were installed in all segments of the creek. After the creek bypass system was operating, brush and debris were removed from the creek starting with Segment B. A low-flow channel was dug in Segments D-F to collect the water in the middle of the creek and allow the sediment near the sides of the creek to dry. Near that time, construction of the TSCA land disposal cell began. At the request of U.S. EPA, START mobilized to Sauget on April 11, 2001 to begin oversite monitoring activities.

During the construction of the TSCA land disposal cell, sediment was removed from Site M and Segments D and E, and ten groundwater monitoring wells were installed. A wastewater treatment system for the cell was installed. Construction of the TSCA cell was completed on September 19, 2001, with the first load of sediment placed in the cell the following day.

All sediment was removed from Segments B-E by the end of 2001, with removal of sediment from Segment F completed on February 6, 2002. Collection of confirmatory samples of creek sediment began in November 2001 and completed in January 2002.

By late February 2002, all sediment had been removed from the creek and a total of approximately 50,384 cubic yards of sediment were placed in the TSCA cell. Placement of the temporary cover on the TSCA cell began on February 28, 2002.

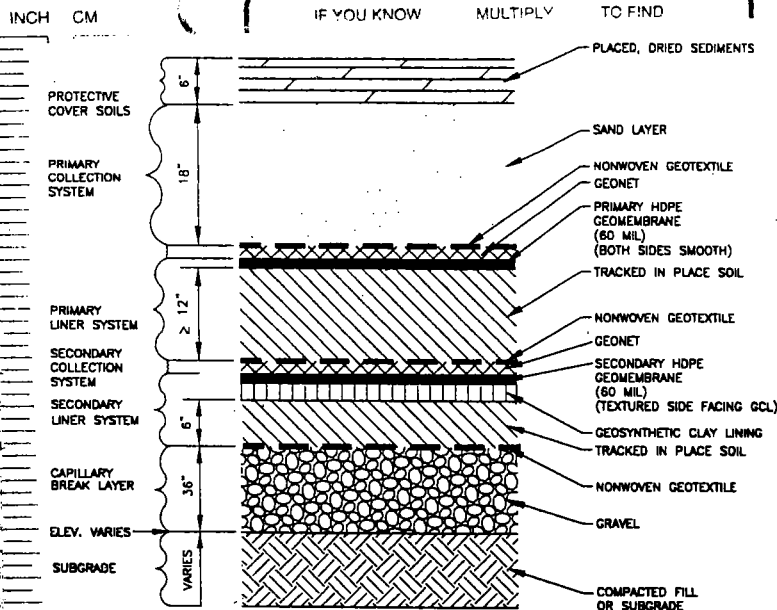
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- Demobilization and decontamination of equipment;
- Completion of the temporary cover on the TSCA cell;
- Removal of the dewatering piping system and other equipment from the creek segments;
- Demobilization of the cell wastewater treatment system and establishment of a carbon filtration unit.

APPENDIX A
LOGBOOK NOTES
(96 Pages)

MEASUREMENT CONVERSIONS

IF YOU KNOW MULTIPLY TO FIND



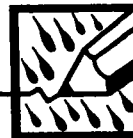
NOT FOR CONSTRUCTION.
LAYER THICKNESSES SHOWN
ARE COMPACTED THICKNESS.

SCALE = N.T.S.

SOLUTIA C100004081.00 IRS Corporation Southern 850 West Courtney Campbell Causeway Apopka, FL 32807-1462 D. 00000002	Drawn: H. WEBER Design: BARRY WHITLAND Checked: BARRY WHITLAND Date: APRIL 2, 2001	PROJECT NAME SOLUTIA INC. SAUGET AREA 1 DRAWING TITLE BOTTOM LINER SYSTEM DETAIL	FIGURE 4-1
--	---	---	---------------

2'	.1667	50.800
3'	.2500	76.200
4'	.3333	101.60
5'	.4167	127.00
6'	.5000	152.40
7'	.5833	177.80
8'	.6667	203.20
9'	.7500	228.60
10'	.8333	254.00
11'	.9167	279.40
1 foot	1.0000	304.80

"*Rite in the Rain*"
ALL-WEATHER WRITING PAPER



Name Tetra Tech EMI

Address 1116 South Towne Square
Suite 303 St. Louis, MO 63123

Phone 314-892-6322

Project Dead Creek Sediment Removal
69009.L. 01. 04. 010

Site # 618-332-2959

Cell # 618-779-7616

618-525-3665 - Kevin cell phone

"Rite in the Rain" - a unique all-weather writing surface created to shed water and to enhance the written image. Makes it possible to write sharp, legible field data in any kind of weather.

140x17718*7

Kevin bag 888-954 product of 3272

Nettel connect

J. L. DARLING CORPORATION
TACOMA, WA 98424-1017 USA

Kandice (Nettel) 314-280-3777

[illegible]

4/11/21

Discussed the project schedule, Health and Safety issues and general process.

Arthur C. Currier 4/11/01

5/4/01

0831 Arrived on site.

0940 Turned site and observed
grading of the cell area and
the creek area with the
Construction Manager.

1207 Departed site.

Arthur C. Currier

3

5/4/01

0840 Arrived on site and
observed cell grading operations
and walked segment B.

1145 Departed site.

Arthur C. Currier

5/7/01

1000 Arrived on site and walked
Segment C after observing
cell grading.

1345 Departed site.

Arthur C. Currier

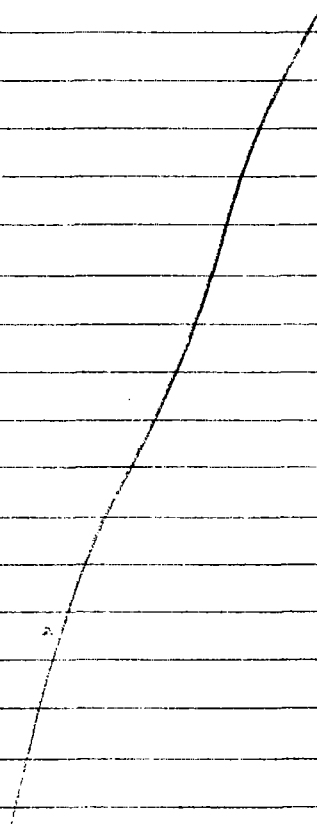
5

5/8/01

1135 Arrived on site and observed
cell grading. Walked Segments
D and E.

1515 Departed site.

Arthur C. Currier



9/6/01

0920 Arrived on site and discussed cell construction with the Construction Manager. He has some ideas to speed up the removal process while waiting for the cell to be completed and wants approval. Walked Segment F.

1300 Departed site.

Robert C. Currier

9/6/01

7

1210 Arrived on site and toured cell construction area. Viewed air monitoring records.

1440 Departed site.

Robert C. Currier

6/10/01

0820 Arrived on site. Toured
cell construction area.

1155 Completed viewing air
monitoring records.

1200 Departed site.

Arthur C. Currier

6/13/01

1000 Arrived on site and toured
cell construction area. Reviewed
LMS QC files.

1230 Departed site.

Arthur C. Currier

6/17/01

0910 Arrived on site. Toured cell construction site.

1000 Continued to review LMS QC files.

1200 Departed site.

Arthur P. Currier

11

6/16/01

0930 Arrived on site and toured cell construction area.

1000 Continued to review LMS QC files.

1130 Toured cell area.

1215 Departed site.

Arthur P. Currier

6/27/01

1100 Arrived on site.

1105 Toured cell construction area
and Site M.1230 Continued review of LMS
QC records.

1355 Departed site.

Arthur C. Curries

6/28/01

0930 Arrived on site.

0940 Toured Site M and cell
construction area.1000 Continued review of LMS QC
records.

1215 Toured Site M.

1240 Departed site.

Arthur C. Curries

4/2/01

0810 Arrived on site.

0815 Toured cell construction area and Site M.

0845 Continued review of LMS QC files.

1030 Toured Site M.

1200 Began POLREP #1 while having lunch.

1300 Ended working lunch.

1325 Completed draft POLREP #1.

1430 Completed review of LMS QC records.

1440 Toured Site M.

1500 Departed site.

Arthur P. Currier

4/2/01

0730 Arrived on site.

0745 Toured cell area and Site M.

0850 Complete final version of POLREP #1.

1600 Departed site.

Arthur P. Currier

0840 Arrived on site. There was about 0.2" of precipitation overnight so no work was occurring in the cell.

0850 Toured Site M.

1200 Departed site.

Arthur P. Currier

13/01

17

0810 Arrived on site. Trucks are bringing fill into the cell and rock for the bottom.

0815 Toured Site M and the cell.

Rock is being dumped in the bottom of the cell and then spread out by bulldozer.

Site M is nearly complete and the removal in M should be done tomorrow.

1100 Departed site.

Arthur P. Currier

9/01

0830 Arrived on site.

0850 Toured cell area. Rock is graded and loads of gravel are being brought in.

1100 Toured cell area. Gravel is being graded as it is brought in.

1515 Complete draft of POLREP #2.

1600 Toured cell. It appears that about $\frac{1}{2}$ of the gravel is in place.

1620 Departed site.

Arthur P. Currier

0900 Arrived on site.

0920 Toured Site M and cell.

Site M removal is complete and the area is being rough graded.

Rock is still being brought into the cell and should be completed today.

1300 Toured cell. Rock is almost all graded.

1510 Departed site.

Arthur P. Currier

7/14

- 1000 Arrived on site.
1005 Toured cell. Nearly all the
gravel is in place.
1100 Meet with OSC and edited
POLREP #2.
1300 Meeting to discuss liner
installation until 1415.
1500 Completed POLREP #2. There
has been moderate to heavy
rain since about 1430.
1530 Departed site.

Arthur C. Currier

21

9/9/01

- 0900 Arrived on site.
0915 Toured cell. Area is too
wet to work.
1100 Departed site.

Arthur C. Currier

7/23/01

- 0950 Arrived on site.
 1000 Toured cell. Rain since previous week has stopped work at the cell until next week.
 1120 Departed site.

7/24/01

- 1000 Arrived on site. 85°F/Cloudy
 1020 Toured cell. It was dry enough yesterday to complete grading.
 1040 Began to install geotextile liner on top of gravel. It is sewn together with about a 3" overlap.
 1200 Lunch break.
 1300 Returned from lunch. There is geotextile covering about $\frac{1}{3}$ of the bottom of the cell.
 1330 Visited box culvert cleanout by ER where Dead Creek passes underneath Hwy. 157. Reviewed confined space log and asked about gas monitoring.
 1515 Geotextile mat now covers $> 75\%$ of bottom of cell. All seams appear solidly fastened.
 1610 The last roll of geotextile mat is being laid and sewn. Grading is continuing at Site M.
 1625 Departed site.
 Arthur R. Currier

7/2/01

1000 - START. Parush is on site.

Weather is warm, overcast (80°F)

- broken plane soil & gey in 157

- layer of gneiss in cell

- grading site M.

photos

1) site M grading - 1005 - NE

2) cell - working soil 1005 - NW

- creek - cleaning out culverts at 157

- next week - hope to employ 2 CL on cell

- hope to have all in place in September

photos

3) panorama, all plane soil 1010

4) view of layer of gneiss

5) " " " " " " - 1015

6) close view of liner - 1019 - down

7) view inside cell - 1020 W

8) stockpiled sediments near site M S

a) " " " " " " - 1030 N

1145. same activities since last entry.

Parush off site.

1150 - Parush at 157 culvert cleanup

photo 10 - operation at 157 - SW

7/2/01

1550. Parush is back on site.

~82°F, overcast.

activities

- continuing to up & grade site M.

- fencing in dirt & grading on

cell. Area is about 3/4 covered

with soil at this time (1600).

- are now clearing south side of

culvert at highway 157.

- got a little bit of rain

1630 at culvert, 157, got bulk of

material out, steam clear, pressure

washing left.

Joel M. Parush

7/1/01

0900 Arrived on site. Sunny and hot (85°F). Grading is continuing in cell and Site M. Photographed cell facing NW and Site M facing E.

1030 Visited culvert cleanout at Hwy. 157. All material has been removed and steam cleaning is underway. Photographed upstream and downstream ends of box culvert.

1215 Workers broken for lunch at all areas. Work will continue later. Schedule for the rest of the day includes final grading and trenching for liner at cell, grading at Site M, completion of steam cleaning at Hwy 157, and removal of two large tanks from water system.

1300 Departed site.

1530 Back on site. Trenching underway at cell. Hwy. 157 box culvert will be complete by the end of the day.

1700 Departed site.

Arthur C. Currier

7/1/01

0750 Arrived on site. Sunny, calm and about 82°F . Hwy. 157 box culvert has been completed.

Grading at Site M and smoothing the inner cell walls is continuing.

1015 Continuing smoothing the inner walls of the cell and digging the anchor trench for the ECL liner. Photographs of anchor trench and cell interior.

1205 Continued work on cell and anchor trench.

1300 Departed site.

Arthur C. Currier

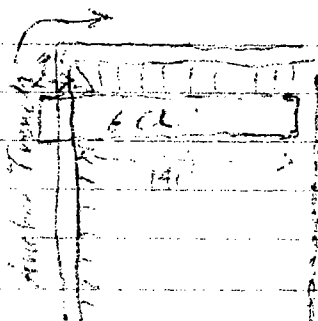
8/1/01

0805 Arrived on site. Preparations are underway to clean the box culvert at Hwy. 3. Grading is continuing at Site M. The anchor trench is completed on the south side and about 75% complete on the east side. Photographed south and east anchor trenches and the cell interior.

0930 Met to discuss process of cell lining.

0935 Uncovered first roll of GCL for installation. Photographed roll on the loader.

1002 Deployed first roll of GCL. Photographed deployment and deployed roll and end of roll in anchor trench.



N

8/1/01 Cont.

1015 Photographed deployment of second roll.

1022 Photographed GCL liners from bottom of cell and photographed cell from SW corner.

1029 Photographed deployment of third roll.

1040 Deployed fourth roll.

1042 Photo of overlap between second and third rolls at bottom.

1051 Deployed fifth roll.

1100 Deployed 6th roll.

1135 Photo of granular material to assist in making the seal between the rolls.

Granular material is bentonite.

1155 Broke for lunch.

1250 Lunch ended.

1305 Photos of GCL installed from south side and closeup of graded inner cell.

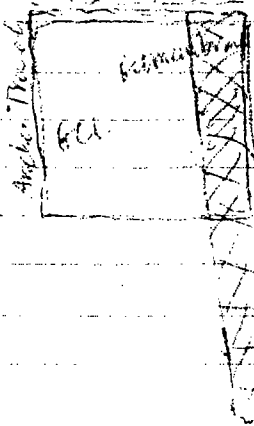
1330 Site M is completed. Seeding will occur next week. East anchor trench is complete. West anchor trench is about 50% complete.

1345 Photo of sampling excavation.

1350 Photo of sample collection.

C/31 cont.

- 1405 Photo of GCL liner facing SE.
 1410 Visited culvert cleanout site at Hwy 3 and photographed upstream end of the box culvert. Confined space log is in place and about 30 feet of debris has been removed from the box culvert.
 1425 Viewed removal of sediment from Segment D. Had to assist in determining where sediment ended and clay began. The clay has a slightly green tinge. Photographed channel.
 1510 Back to cell. The first roll of geomembrane has been placed and is being smoothed. Took photo facing NNW.



- 1620 Deployed 2nd roll of geomembrane.
 1629 Photo of first geomembrane seam to be welded.
 1635 Photo of trimming geomembrane liner.
 1645 Deployed GCL.
 (Signature) Chris

9/2/01

31

- 0805 Arrived on site. Sunny, calm, 83°F
 Visited box culvert cleanout and toured cell area.
 0922 Photo of cell interior facing S.
 0938 Photo of air testing of geomembrane liner. Test passed.
 1000 Photo of cell interior facing NE.
 1110 Photo of GCL deployment.
 1132 Photo of box culvert passing under Hwy. 3. Confined space log is complete. There was a spike of CO in the O&V readings but it was within limits.
 1142 Photo of creek at Segment D with sediment removed. Removal has progressed about 75 feet north of Hwy. 157.
 1145 Photo of small excavator removing sediment at Segment D.
 1146 Photo of large excavator taking sediment from Segment D and loading it into the articulated truck.
 1155 Stopped for lunch. All air tests have passed so far.
 1230 Lunch break over.

8/3/01 cont.

- 1300 Photo of deployment of final piece of GCL in NE corner of the cell.
- 1330 Began trenching for collection and detection piping in NW corner. Took photo.
- 1410 Photo of geomembrane spread across the bottom of the cell.
- 1420 Photo of patch in geomembrane liner where air testing was done.
- 1423 Began welding the geomembrane seams on the floor of the cell.
- 1515 Photo of patch being sealed.
- 1540 GCL laid today is about 75% covered.
- 1552 Box Culvert under Hwy. 3 is planned for about 80 feet.
- 1605 Sediment removal from Segment D is about 150 feet north of Hwy. 157.
- 1615 Departed site.

Arthur A. Currier

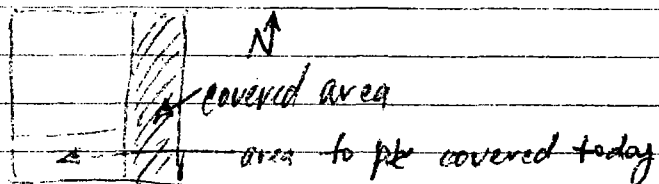
8/3/01

- 0135 Arrived on site. Cloudy, calm, 75°F. There was 0.86" of rain at the cell area last night so no liner deployment is scheduled. Due to rainfall, no work at Segment D is taking place and the water will need to be pumped from the box culvert at Hwy. ~~157~~³ to work there.
- 0800 Pumping is underway at the Hwy. ³ box culvert.
- 0830 Photographed interior of the cell showing the completed GCL and HDPE geomembrane. Photos also show water ponded in the NW corner of the cell. The only work scheduled for the cell today is air testing of seams and patching.
- 1030 Departed site.

Arthur A. Currier

5/6/01

- 1000 Arrived on site. Sunny, calm, 75°F. Work has begun again on clearing the box culvert passing under Hwy. 3. The areas of the cell that aren't covered by liner are being graded.
- 1020 Grading of the cell is completed sufficiently to begin laying GCL.



- 1025 Photo of cell interior facing NE.
- 1052 Photo of NW corner of cell. The standing water from last Thursday's rain was gone by Saturday, but the area is still saturated.
- 1150 Stopped for lunch.
- 1230 Finished laying GCL on the south side.
- 1245 Began laying HDPE geomembrane over GCL.
- 1255 Checked Hwy. 3 box culvert cleanout. Sediment and debris have been removed for about 110 feet.

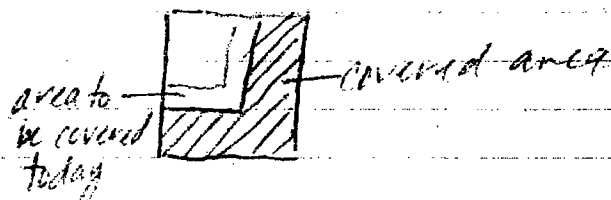
5/6/01 cont.

- 1333 Photo of cell from NE.
- 1500 Seaming of laid geomembrane is underway.
- 1530 Cleanout of Hwy. 3 box culvert may be completed tonight.
- 1610 Departed site.

Arthur P. Curries

8/7/01

0800 Arrived on site. Sunny, calm, 75°F.
Hwy. 3 Box Culvert will be
power washed today and sediment
removal between Hwy. 157 and
Parks College in Segment D is
nearly complete. Cell is about
60% covered with geomembrane.



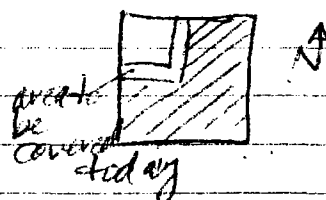
- 1001 Photo of cell facing NE.
- 1010 Photo of cell interior facing NE.
- 1420 Sediment removal between Parks College and 157 in Segment D should be completed tonight.
- 1500 Began cleaning box culvert under Old Hwy. 3. Sediment is about 3 feet deep.
- 1530 Departed site.

Arthur C. Currier

8/8/01

37

- 0805 Arrived on site. Sunny, calm, 80°F.
Cell plan for today is to put down
more ECL and geomembrane and
then start placing geonet in
covered areas.
- 0820 Cell is about 70% covered.



- 1030 Photo of cell facing NE.
- 1033 Progress meeting until 1115.
Major topics included safety,
schedule and the ramp to bring
in material to cover the liners.
- 1130 Toured Segments D and E with
CM and IEPA. Took photos
of completed Segment D sediment
removal near Parks College.
- 1145 Photo of sediment removal at
Segment E between 157 and 3.
The plan is to complete this
removal tonight.
- 1155 Photo of totally cleaned box
culvert entrance under Hwy. 3.

8/8/01 cont.

1200 Photo of Box Culvert clean out
under Old Hwy. 3.

1430 Began placing geonet. A 6"
pump had been placed at the
sump in case of heavy rain.

1545 Sediment removal between 3
and 151 is about 50% complete.

1630 Departed site.

Arthur P. Currier

8/9/01

39

0820 Arrived on site. Cloudy, calm, 80°F.

Sediment was removed from the
creek between 157 and 3. Geonet
is being placed on the covered
area of the cell.

1000 Photo of cell facing NE. Only
about a 100'x100' portion of the
cell floor and associated slopes
need to be covered. The east
slope is covered with geonet.

1120 Photo of cleaned creek segment
from on top of the Hwy. 3 culvert.
Riprap has been placed at the
entrance of the culvert and
over a waterline for protection.

1310 Photo of cell facing NW with
6" pump visible on far slope.

1312 Photo of geonet showing overlap
and fasteners.

1330 Fencing and other protective
items have been removed from
the Segment E area. Grass
seed will be spread in the
broken down areas. No further
work is planned for the Old

5/9/01 cont.

Heavy 3 box culvert alcant until next week.

1400 Discuss the change to the implementation schedule for the access ramp with Rob Watson of ITRA. He said it was a great idea and an excellent time saver.

1445 The cell is about 40% covered with ~~geomembrane~~ geonet. The liner material in the anchor trench is being covered with 12" of material where the geonet has been installed.

1450 Departed site.

Arthur C. Currier

8/10/01

0715 Arrived on site. Cloudy, calm, 73°F.

No work is being done on the creek. There is a small amount of standing water in the sump from the 0.25' that fell yesterday afternoon and night. Work in the cell today will consist of placing geotextile over the already in place geonet and placing more geonet.

0840 Photo of cell facing NE.

0841 Photos of sump area with standing water.

1300 Geonet and geotextile continue to be placed. Photo facing NW.

1330 Departed site.

Arthur C. Currier

8/13/01

0805 Arrived on site. Sunny, light breeze, 73°F. The box culvert under Old Hwy. 3 is being cleaned out. The sump in the NW corner of the cell is being excavated and replaced with dry material. The GCL is being placed near the sump area. The cell is about 75% covered with geonet and the cell floor is about 60% covered with the second layer of nonwoven geotextile.

1015 Photo of cell facing NE.

1017 Photo of rolls of geotextile staged on the floor of the cell.

1018 Photo of GCL placed this morning.

1020 Photo of the sump area after the wet material was removed and the dry material is being graded.

1021 Photo of sump area grading facing W.

1100 The box culvert under Old Hwy. 3 is being dewatered. There is about 12" of water in the channel upstream of the box culvert.

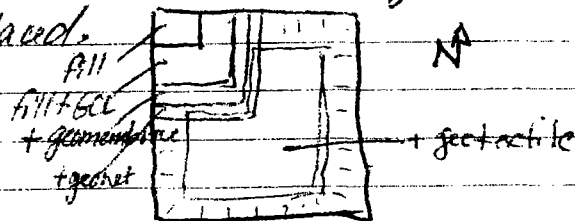
1145 Liner crew broke for lunch. Grading

8/13/01 cont.

~~am~~ and smoothing of the sump area is continuing.

1150 Photo of NW corner of cell. The cell is about 95% covered with GCL.

1250 The NW corner of the cell is being smoothed and the final grading is being done. Soil has been placed in the anchor trench where the geonet has been placed.



1300 Liner crew began deploying HDPE geomembrane over the GCL.

1315 Geomembrane is being welded.

1325 Liner crew began deploying GCL in the sump area. Geomembrane welding is continuing.

1440 Sediment ^{stockpiles} are being removed from Segment E north of the Parks College Culvert.

1445 The box culvert under Old Hwy. 3 is down to about 3" of water.

5/13/01 cont.

1525 GCL is still being deployed. The plan is to install all the GCL and cover it with geomembrane.

1535 The final piece of GCL was deployed. Photos of NW corner during placing of final piece and cell facing NW.

1610 Departed site.

Arthur C. Currier

8/14/01

0755 Arrived on site. Sunny, light breeze, 66°F. The water has been pumped out of the box culvert under old Hwy. 3 and preparations are underway for cleaning it out. Sediment stockpiles from north of the Parks College Culvert are being removed. The cell is completely covered with geomembrane and final welds are underway. Air testing of the seams is being done as seams are welded.

0830 The geomembrane and geonet at the SE and SW corners is being installed at the ramp locations.

0945 Photo of cell facing NE.

1123 Photo of SW access ramp under construction.

1125 Photo of grading for SE access ramp.

1445 - 1230 Work crew at lunch.

1303 Photo of stockpile removal area north of Parks College Culvert.

8/14/01 cont.

1340 Box culvert under Old Hwy. 3 is cleared of sediment and debris.

All that remains is hydropraying.

1355 Material is being shifted in Segment B so that a longer drainage pipe can be installed.

1615 Departed site.

William P. Currier

8/15/01

0810 Arrived on site. Overcast, calm 72°F.

Box culvert under Old Hwy. 3 is cleaned. Drainage pipe in Segment B is being lengthened. Geonet is being installed in the cell.

0830 There was a report of a petroleum odor in the creek sed. across from an AST at Parks College. Will investigate later today.

0920 Photo of cell facing NE.

0930 Photo of SW access ramp.

1000-1045 Weekly liner progress meeting.

1100 Investigated petroleum odor near Parks College. Checked potential sources such as storm water runoff and the day tank across the street. No apparent source was located and the odor is not present.

1145-1230 Liner crew at lunch.

1350 Geonet is in place and attached.

8/15/01 cont.

1455 geotextile is down and is being
sown. Photos of cell facing NW,
another trench being filled and
the final piece of geotextile being
sown.

1540 The secondary liner is complete.

1545 Photos of creek bediment
removal north of the Parks
College culvert.

1555 Photo of cell facing NW.

1605 Departed site.

Arthur C. Currier

8/16/01

0810 Arrived on site. Cloudy, wind from
the west, 70°F. There was a bit
of rain last night but the ground is
dry and there are a few wet
spots in the cell. The geogrid
did not arrive as scheduled so
no work on the cell is planned.
The berm and foundation for
the water treatment facility ~~is~~
are being readied adjacent to the
trailers and sediment removal
is continuing north of the
Parks College culvert.

1100 Photo cell facing NE.

1215 Departed site.

Arthur C. Currier

8/17/01

0805 drive on site, weather is sunny, 70°S.

0814 - from "fitts" lower on water treatment cell - West

0815 - Overview of water treatment cell - S
diver is in place

At cell area, are beginning to lay gravel over geogrid

0830 - photo: overview of lay, gravel over geogrid.

Other activities: spreading soil over cell berm, building access road to cell.

0837 - photo - SE - gravel to back road.

- are continuing to work on finishing placement of poly liner on water treatment cell.

Other activities: are excavating at (North of) Paul's Calleg. & bringing material and stockpiling at site M - will continue this operation in 1/2 hour (915), excavator is about 30% done at this time, according to crew.

PM confirms Paul, that clearing from Paul's Calleg. to S.C.S. will be done

8/17/01

in 2 to 2 1/2 weeks.

What is left to complete the cell:

- Construct access ramp.
- 6" gravel in place fill above road.

- primary membrane, HDPE

- Geotext

- Geotextile fabric

- 2 feet of sand to top it off.

ETC: 1st week of October

0920 - photo: stretching in geogrid on access ramp (SW corner) - W.

photo - as above, - NE

- continuing to lay gravel on access ramp & build road to cell

- are using stock material w/ log slash at ~~200 ft~~ photo of this, N

- clearing vegetation across street at culvert.

0945 - Kevin Turner on site meeting with PM

note - greenish clay below road stained clay, so it suspect contamination by dark organic stain.
laying 6" of additional material, above capacity of concern.

8/17/01

sampling? cost of sampler issue
 \$2500 re. sample/reducing sampling?
 some meeting both removed &
 remedial goals as far as sampling
 reducing sampler may not meet
 remedial goals.

Three sampler per transects sampler
 F will cost more for analytical
 than excavation, want to do it for
 every 100 feet to 300 feet, proposed
 by Solatia.

Other suggestions key START; Composite
 sampling.

1050 - 13th, PM & START out at plant
 removal area for Pomas Valley

photo - cleared creek area route 31/57

1112: Meeting / Solatia / Mike

issues: ^{FIRST} want quick acceptance of all
 w/ two days want to be dropping reports.
 OSC will get verbal then follow up w/ email.
 hold meeting as soon as possible in ~~an~~ schedule
 much in advance.

Sampling second

- alternative protocol to reduce
 analytical

8/17/01

- OSC brought up remedial issue
 remedial needs more data.
 - greater number in higher
 concentration area, less as you go
 downstream - suggestion by OSC
 especially section F, can reduce samples
 here.

another option - change frequency of
 some parameters, non DHA/Fen,
 metals, SVOC, VOC, etc - full scan.

- Don't alter plan in segment B

- composite every 100 feet instead
 of 3 samples per transect.

- 3rd issue - Apartment sample steep
 slopes - concerns about liability,
 water ponded at creek bed 2-3' deep.

- 4th issue - grading of creek, doesn't flow
 very well.

For 3rd issue - placing 4 feet
 high fence.

5th ground water monitoring wells -
 will begin construction on Monday.
 Start with Tupper deester at
 bottom of West slope.

6th high levels of PCBs found in
 duff to stream - not related.

8/17/01

1200 lunch

1230 back from lunch

activities:

- placing geofabric liner on water treatment cell (nearly done)
- working on SW cell ramp, base SE ramp complete
- stockpiling materials at segment B near site M
- continuing sediment excavation

1400 - activities

- geofab^{lin} geotextile in place in W.T. cell, as now laying gravel layer.
- continuing to build access ramp to cell. (SW corner)
- photo: completed ramp, SE corner
- photo: building ramp, SW corner
- grading cell floor with bulldozers
- building it up against cell wall
- stockpiling soils at segment B.
- excavation of creek side continuing

1537. Activities, same as before

- placing pumps in bottom of cell in case of rain
- photo of above: North

8/17/01

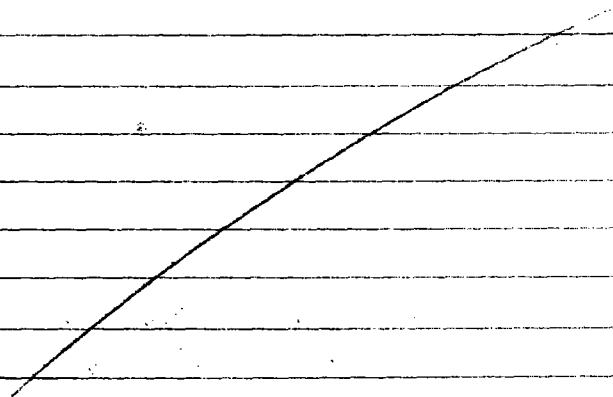
1555: Plants of water treatment cell laying out gravel (EAST).

1630 - progress on cell:

Both ramps appear completed, so working on level on cell now, for a day.

- other activities: continuing to spread gravel on water treatment cell.

1705: Parish is at red removal area near Park College, are continuing w/ excavator - photograph. Parish off site.



3/20/01

1020 Arrived on site. Clear, calm, 72°F
The access ramps to the cell
were completed ~~and~~ ^{on} Friday and
material for the 12" layer started
coming in this morning. Sediment
removal near Parks College is
continuing, and Solatia JURS
will be installing GW wells
beginning today.

1022 Photo of cell facing NE.

1023 Photo showing detail of SE
access ramp.

1025 Photo of boxed area where the
storm water treatment facility
will be located.

1100 Met with Solatia JURS to talk
about placement of GW wells.
Installation of the 2 wells between
the creek and the cell on the east
will be first.

1235 Photo of cell facing NW.

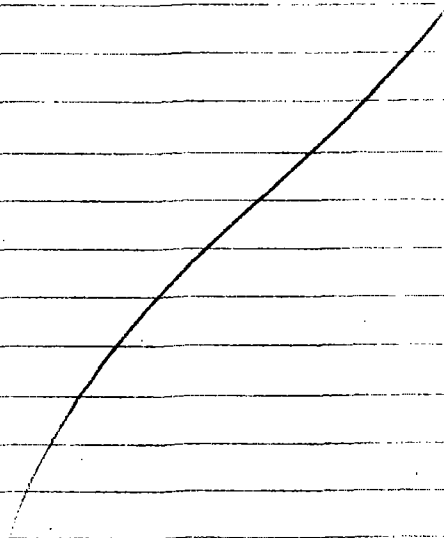
147 Photo of cell facing NW. The
drill rigs for the 2 GW wells
are in place and drilling has
started.

1500 The floor of the cell appears
to be 50% covered.

1601 Photo of cell facing NW.

1615 Departed site.

Debut? Annie's



5/21/01

0800 Arrived on site. Sunny, light breeze from the east, 72°F. Sediment removal at Parks College is continuing. EW well installation east of the cell is continuing. 276 loads of material were brought in yesterday and the cell floor is about 80% covered.

1030 Photo of cell facing NE. The liner drainage pipe is also being installed in a gravel layer that be covered by 12" of tracked in place soil.

1135 Photo of tanks in storm water treatment area.

1242 Photo of riser pipe and gravel in the sump.

1252 Photo of cell facing SW.

1345 Photo of riser pipe covered with gravel in the sump. Began removing the SW ramp.

1358 Photo of the cell facing SE.

1405 Photo of seaming geotextile over riser pipe in sump.

1417 Photo of installation of GW

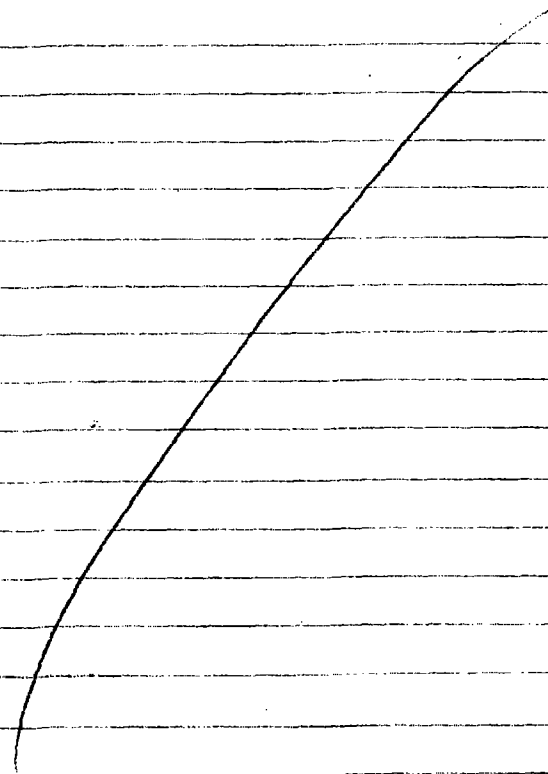
well TCMW - 3M near the NE corner of the cell.

1420 Began placing soil over the sump.

1445 Tracked in soil covers the floor except for the high point and the bottom of the ramps.

1530 Departed site.

Atkott Curries



8/22/01

1650 Arrived on site. Sunny, light breeze from S/SW, 83°F. Sediment removal near Parks College and BW well installation east of the cell are continuing. 80 loads of material were brought in yesterday. The cell floor is covered except for the bottom of the SW ramp. Grading of the soil is underway and some will have to be removed.

1650 Sediment removal near Parks College observed.

1200-1330 Assisted with Site & project.

1500 It appears that about 10 loads of material will need to be removed from the cell.

1600 Departed site.

Arthur C. Cunniff

8/23/01

0825 Arrived on site. Sunny, calm, 80°F. Sediment removal near Parks College and BW well installation continue. The 2 BW wells on the east side of the cell are in and protected by Jersey barriers. Installation of geomembrane has begun on the east side of the cell and extra soil is being removed from the cell via the SW access ramp.

1020 Photo of cell facing NW.

1055 Extra soil has been removed and the bottom of the access ramp has been prepared for installation of the primary liner.

1120 The cell is about 30% covered with geomembrane. It has gotten cloudy and there are occasional brief, light showers.

1148 Photo of installation of 25 foot BW well near the NW corner of the cell.

1245 Photos of sediment removal behind pizza place north of Parks College.

8/24/01 cont.

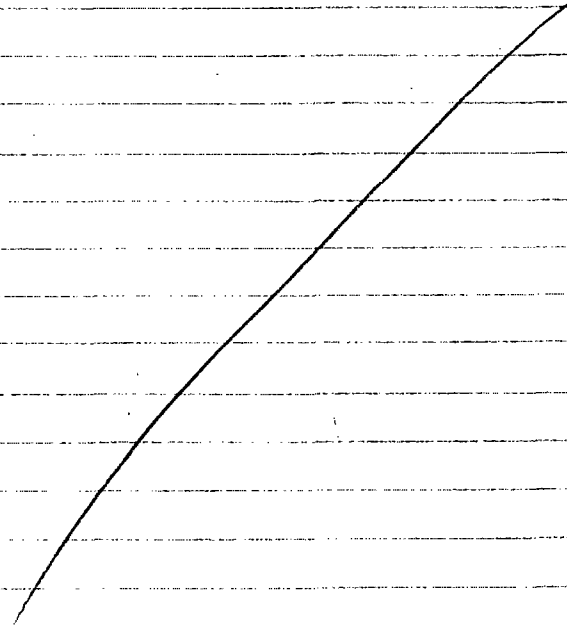
1330 Photo of cell facing NW. Cell is about 40% covered with geomembrane.

1341 Photo of sediment being turned over for drying.

1610 The cell is about 75% covered with geomembrane and welding of the seams is underway.

1650 Departed site.

Arthur C. Currier



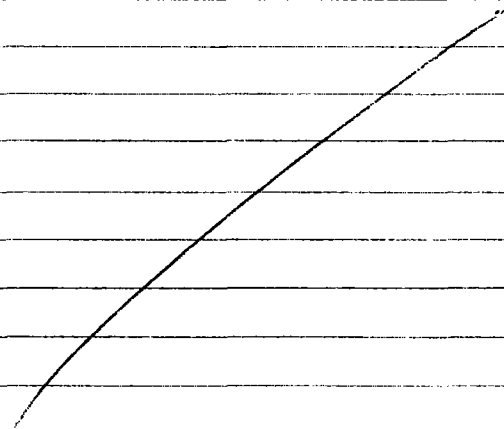
8/24/01

0715 Arrived on site. Cloudy, calm, 72°F. Received 0.55" of rain overnight and the area is too wet for work. Detailing is occurring in the cell.

0950 Photos of cell facing NE, EW drilling rig in standing water, and sump. The sump had no standing water from the rain but is very soft.

1030 Departed site.

Arthur C. Currier



5/27/01

0700 Arrived on site. Sunny, calm, 70°F.

Had additional rainfall Friday night (0.17"), Saturday (0.22") and Sunday (0.08"). ER is setting up near Edgar to continue sediment removal. Work on

installation of 6W wells near the west side of the cell is underway.

Drilling of 6W well TCMW-63 is underway and well TCMW-64 is scheduled to be drilled today.

The soil in the cell is still very wet and can't be covered with geomembrane until it dries more.

The geomembrane that was laid on Thursday is being detailed.

0815 Photo of Sump.

0900 Photo of cell facing NE.

0910 Photo of drill rig at TCMW-65.

1015 Photo of sediment removal just south of Edgar St.

1050 Photo of standing water in the creek at Parks College. The water is 12" in places and 2 pumps are being used to dewater the channel.

5/27/01 cont.

1200 Liner detailing is nearly complete. The second pump is operating to remove water from the creek near Parks College.

1530 Photo of western portion of cell showing wet soil.

1535 Drilling is continuing at TCMW-65. ARS is attempting to develop the wells on the east side of the cell. Detailing is complete and the liner crew has departed.

1600 Departed site.

Arthur Currier

8/28/01

0805 Arrived on site. Sunny, calm, 75°F
 The cell is still wet in the sump
 area and on the west side. The
 entire wet area is going to be
 rough graded to speed drying.
 The toe of the slope on the
 north side also is being fixed.
 The creek was dewatered near
 Parks College overnight. Sediment
 removal is being done at Parks
 College and at Edgar. Drilling
 is being done at well TCMW-64.

0820 The River crew is deploying
 geonet in the east portion of
 the cell.

0830 Photo of cell facing NE. Observed
 grading in cell to move soil.

0850 Photo of sump area.

1000 Photo of grading operation.

1015 Observed sediment removal at
 Parks College and Edgar.

1130 Observed sampling of creek bed
 for storm water constituents.

1200-1245 River crew took lunch.

1330 Geonet has been laid and

8/28/01 (cont.)

covers about 60% of the
 geomembrane.

1350 Began laying geotextile on
 the cell floor and the east
 slope.

1545 Photo of cell facing NE. The
 0830 photo was deleted.

1600 Departed site.

Robert E. Currier

8/2/01

0805 Arrived on site. Sunny, calm, 71°F.
Observed work at Parks College
and Edgar sediment removal.
Grading in the sump and west
areas of the cells is continuing.

0930 Photo of cell facing NE

0940 Photo cell floor near sump.

0942 Photo of grading near the sump
area.

1000-1030 Weekly linear status meeting.

1030 Tour of cell with CM and
IEPA.

1050 Photos of mud mats for IEPA.

1200-1200 Lunch

1300 Geonet is installed. Deploying
geotextile is underway.

1500 One of the monitoring wells has
been developed. The pumps are
causing problems at two other
wells.

1600 Departed site.

Arthur C. Currier

8/30/01

69

0710 Arrived on site. Sunny, calm, 75°F.

Safety meeting is underway. Sediment
Removal is continuing at Parks
College and Edgar.

0720 Began removing wet material
from the cell floor.

0950 Wet material has been stockpiled
near the SW ramp for removal.

Dry material has been placed
and is being graded.

1030 Photo of cell facing NE.

1040 Photo of grading near the sump.

1130 Began deploying geomembrane
on the north slope.

1330 Grading of area near the SW
ramp is completed.

1400 Began deploying geomembrane
on the cell floor.

1600 Departed site.

Arthur C. Currier

C

8/31/01 Friday

0915 - Pump down site, used the
is clean, 70'sactivities - doing repairs in cell
on poly liner before lay down rest of
geotextile, ^{membrane} has about 2/3 of membrane
geotextile down.- building up berm with dozer
on

- photo (0934) repair operation.

- photo (0936) liner layers.

- working stockpile in segment B.

1009 - RT road excavation site at Edgar &
White St. have two excavation
teams going ~1/4 mile in between.
photo - excavator loading back.

Segment DE, sub

Air testing of seams - could not
do yesterday because of rain. are
done today along with patch
work. detail work rest couple of
days.Goal is to complete excavation to
Edgar Rd rest week / will be 40%
done (time wise).

71

8/31/01 Friday

1103 - continuing detail work on cell
liner / other activities are the same.

1140 - out to lunch

1215 - back from lunch

1320 - At cell, are continuing detail
work, are hauling up geonet to
begin placing (have ~1/3 of cell to
complete) detail work consist of
air tests & patching. Same other
activities are continuing.1335 - Paul off site to go to office
for short while.

1515 - Paul back at the site.

Activities: detail work continuing
in cell, no problems encountered.
Have about another day of patching/
air testing, no geonet in way spread
out today, only detail work.

- continuing same activities

- Arriving at 1600 hrs today
for holiday week end.

1615 - Paul off site.

7/4/01 - Tuesday
 0750 - Punched on site with
 in class, ~70°F
 Activities:
 - laying out geonet at cell / some
 patchwork left to finish, dated work
 - continuing excavation between College
 & Elgar Road.

0912 - progress update: patching will
 likely be done by tomorrow afternoon,
 finish by Thursday - will start laying
 sardin at then.

0920: current activities:
 - excavating ditch for waterline
 & ditches to water treatment area
 - continuing to lay out geonet on
 cell.

- continuing excavation at segment E.
 1030: Since last entry
 continuing laying out geonet, air
 testing, patching, dated work, &
 some other activities.

1050 - Paul off site for office & home

1230 - Paul back on site.

7/4/01 - Tuesday

1310 - activities continuing:

- patching, air testing
 - staging geotextile & lay over
 geonet / bare stain 1/4 full left
 to cover with geonet.
 - continuing to excavate & stockpile
 from segment E.

1400 at excavation at Elgar Rd.
 two excavation teams are
 about 50 yards apart at this time.

1450 - Since last entry, are laying
 out geotextile over geonet / continuing
 with patching & air testing.
 - continuing to excavate ditch for water
 line, as per all at this time.

1540 - photo: excavating ditch - S
 - patching & air testing continuing, have
 about 25% of line to finish.

1600 - at Elgar St. excavation only
 one excavation team is busy at this time.

1640 - photo (N) patching operation.

1657 - photo (N) air testing / patching
 - have about another 3 hours of the work
 left / some activities continuing.

1715 - leave site.

8/5/01

0820 Arrived on site. Sunny, calm, 72°F.
EW wells have been purged. The
geomembrane is in place and geonet
is being laid on top of it. Photo facing NE.

1300 Geotextile is being laid on top of
the new geonet. Sediment is being
removed from the creek between
Parks College and Edgar.

1355 The final piece of geonet was
deployed.

1550 Sediment removal between Parks
College and Edgar will probably be
completed tomorrow. Geotextile has
been deployed on about 90% of
the cell and will be completed
tomorrow.

1555 Departed site.

Arthur C. Currier

9/6/01

0750 Arrived on site. Sunny, calm, 75°F.

The sediment removal between
Parks College and Edgar is nearly
complete. The west slope is covered
with textile and is being sown.

The first load of sand was brought
in on the SE ramp ~~at~~ ~ 0715 and
the first load of sand was brought
in on the SW ramp ~ 0800.

0900 Photo of cell facing NE.

1000-1030 Liner status meeting.

1038 Photo of sand placement showing area
left for Meramec gravel at the toe
of the east slope facing N.

1039 Similar photo facing west.

1042 Photo of dump area facing NW. About
100 feet of the north slope remains
uncovered by textile.

1145 Toured cell area. Photo of sediment
screening. All the textile has been
deployed.

1330 All the textile has been sown.

1422 Photo of sand deployment near
the SE ramp.

1510 Photos of sediment removal south
of Edgar.

1600 Departed site. Arthur C. Currier

7/7/01

- 0755 Arrived on site. Sunny, calm, 75°F.
The excavation south of Edgar St.
is completed and the creek just
north of Edgar is being prepped
to begin excavations on Monday.
209 loads of sand were placed in
the cell yesterday and more is
being placed today. Sediment
screening is continuing and some
gravel will be placed in the cell today.
- 0815 Photo of cell facing NE
 - 0820 Photo of west slope and anchor trench.
 - 0822 Photo of cell facing SW.
 - 0825 Photo of cell facing NW.
 - 0830 Photo of south slope showing
ramps and trucks unloading.
 - 0850 Photo of utility trench showing
2" water line in place and
conduit ready to be installed.
 - 1000 Observed removal of mud mats
and equipment decon near Edgar
St.
 - 1030 Departed site.

9/7/01

- 1240 - START Pump in or into to replace
START pump.
- 1315 - Activities:
- working a large conduit in
ditch by water treatment.
 - Cell: Laying and spreading sand
over primary barrier.
 - + excavation: - on excavator bar,
finishing up loading sediment south of
Edgar.
- 1430 - excavator becoming hooked up
excavator tracks preparing to move
to south side of Edgar, well being
304 down a Monday / more mud mats
and ~~craps~~ around area.
- 1450 - Conduit in, as ~~from~~ concrete trench
now.
- 1500 - Cell - Continuing to load &
spread sand / ex. placing Meramec
gravel along bottom berm edge
- 1507 - Photo (NE) of this operation
after activity - continuing to build berm
around all with dozer.
- 4530 - at excavation area. as 1. proc.
of placing mats on south side of trench

9/7/01

1530 cont'd, and continuing to decom-
trude of excavator

1617 - at cell, continuing spreading sand
has gravel spread on south side 2/3
done with random portion of cell.

1618 - Photograph of this above.

1635 - at excavator / segment c / still
proceeding with decom-
struction -
Paul off site -

9/10/01

0850 - START Paul is out on site, and the
is clear, 460°F. Paul is covering up
for future till this afternoon.

Activities at this time

- not excavating because of rain
over weekend

- Poyers are standing at cell

- preparing to screen material before
it goes into cell

- cherry pump out along creek

1020 - present activities:

- screening material from top of
photo: NE

- surveying all tested grade of cell
sand - getting to grab get.

1055 - at segment E, Chgo. St. - have
pump too fixed, are excavating material
material on south side next to current,
are going to build over road to north
side excavation today, start at north
side tomorrow.

- Paul off site -

1230 Carrier on site. Bringing
additional sand into the cell

1400 Photos of cell facing NE and SW.

1550 Departed site. Arthur C. Currier

9/11/01

0805 Arrived on site. Sunny, calm, 70°F
Sediment removal has begun just
north of Edgar St. The sand has
been brought in to the cell.

Grading is underway.

1000 Photo of cell facing NE.

1145-1230 Crew broke for lunch.

1230 Grading in cell continuing.

1300 Observed sediment removal.

1350 Gravel placed at the toe near the
SW ramp.

1400 Photo of gravel near SW ramp.

1500 Photo from bottom of SW ramp.

Grading of sand is about 50% done.

1507 Photo of DB being placed at
the foot of the SE ramp. DB
is being used in place of the
Mexamec gravel since it is in
the high point and will make
a better road.

1545 Departed site.

Arthur P. Currier

9/12/01

0810 Arrived on site. Sunny, calm, 71°F.
Sediment removal is underway
north of Edgar St. and has
begun south of Jerome Ave. in
Segment E. The sump has been
covered with geotextile and
grading is underway.

0910 Photo of cell facing NE.

0920 Photo of sump area.

1030 Creek north of Edgar is cleared
to about 150'. Creek south of
Jerome is cleared about 50' on
the west side only.

1100-1130 Liner status meeting.

1200 Photo of cell facing NW.

1215 Photo of cell facing SE.

1400 Photo of work on south slope.

1410 Photo showing graded slope on
east side.

1415 Photo of grading on south slope.

1500 Photo of sediment removal just
south of Jerome.

1515 Photo of sediment removal north
of Edgar.

1600 Departed site.

Arthur P. Currier

8/13/01

- 0710 Arrived on site. Sunny, calm,
68°F. Excavation continues
in Segment E north of
Edgar and south of
Jerome. Grading of the
area around the cell is
being completed and the
GW wells are being pumped.
0815 Photo of cell facing NE.
0820 Photo of cell facing S.
0822 Photo of cell facing SW.
1015 Photo of removal at Edgar
facing N.
1230 Photo of removal at
Jerome facing N.
1400 Grading is complete.
1500 Departed site.

Arthur P. Currier

9/17/01

- 1315 - Paul arrived p.d.m. no
activity at this time / at Jerome ~ 150
ft south of Jerome excavated.
At this locality partly in fore, pump
1321 - No core info lead to
interior lake.
1325 - At second excavation site, just
north of Edgar - no excavate at this
time. About 400' from S. end of
Edgar.
1330 - At Cameron Past - Kevin Turner
is on site.
- no activity at all, only dogging
along perimeter area of berm.
1430 - Paul off site, OS left at 1415,
said there was no reason for START to
be on site.

4/17/01

- 0935 Arrived on site. Cloudy, calm, 68°F.
Sediment removal is continuing
between Jerome and Edgar.
The road providing access to the
cell is being improved and
sediment is being screened.
- 0945 Photos of sediment removal
north of Edgar.
- 0950 Photos of low point south of
Jerome with pump and screens.
- 1007 Photo of tackifier on east side
of the cell.
- 1010 Photo of roadway on top of the
south berm facing E.
- 1012 Photo of the cell facing NE.
- 1020 Photo of grading to fill the low
spot north of the cell.
- 1040 Photo of screening.
- 1115 Photo of access road south of
the cell.
- 1150 Departed site.

Arthur P. Currier

85

4/18/01

- 1030 Arrived on site. Cloudy with
scattered showers, calm, 65°F.
Due to rain, no removal or
screening are happening.
Work on the access road is
continuing.
- 1045 Photo of south berm of the
cell facing W.
- 1046 Photo of the cell facing NW.
- 1047 Photo of the east berm of the
cell facing N.
- 1055 Photo of access road construction
south of the cell.
- 1120 Photo of the creek north of
Edgar.
- 1150 Departed site.

Arthur P. Currier

9/19/01

0800 Arrived on site. Cloudy, light breeze, 65°F. No sediment removal due to 1.5" of rain yesterday. GW sampling is underway.

0915 Photo of cell facing NE.

0920 Photo access road along the west side of the cell.

1000-1215 Post cell construction meeting.

1215-1300 Lunch break

1300-1500 ¹⁵⁰⁰ D.M. Flay meeting.

1500 Departed site.

Arthur A. Currier

87

9/20/01

0900 Arrived on site. Sunny, calm, 65°F. Sediment is being removed south of Jerome and the creek is being pumped in the same area.

GW sampling is under way east of the cell near Falling Springs Road.

A new screener is being prepared for use. The concrete blocks are being installed on the SE ramp for the dumping area.

0930 Photos of excavation south of Jerome showing excavators, silt fences, pump and water in the creek.

1000 Photo of cell facing NE.

1007 Photo new sediment screener.

1045 Departed site.

Arthur A. Currier

9/21/01

- 0755 Arrived on site. Cloudy, light breeze, 66°F. Attended site safety meeting. There was about 0.10" of rain yesterday and last night. No sediment removal is planned. The storm water system will be hooked up and the access roads will be improved.
- 0810 Photo of cell facing NE.
- 0820 Three photos of the SE ramp with the concrete blocks.
- 0830 Photo of the larger sediment screener.
- 0845 Panoramic photos of the area.
- 0855 Departed site.

Arthur C. Currier

9/24/01

- 1230 Arrived on site. Scattered clouds, windy, 60°F. Showed Tom the site. Sediment is being removed south of Jerome. The storm water system is hooked up and the ramps are installed.
- 1400 Photo of screener.
- 1440 Photo of SE access ramp.
- 1445 Photo of cell facing W.
- 1530 Departed site.

Arthur C. Currier

Clear, Bristle wind
from West, 62°F

9/25/01

12145 Arrived So. Jerome Ave.
w/ Art. Heavy equipment was
removed yesterday after
completion of sediment removal
and decar.

1302 John Fione continued sediment removal
completion of CSE Jerome Ave So.
Maximack having trouble w/ Screen unit
but expecting to start sediment
placement into cell Tomorrow 9/26/01

1340 Kevin Turner arrives for 20 min.

1401 Kevin Departs after briefing
from John Fione & Art Overman

1415 Photo to NE of Cell
photo of Sediment from Site
M being screened & stockpiled

1430 Depart SITE

Home D. Dwyer

9/26/01

Clear, Cool, Sunny 50°F

0806 Arrive Equipment for
sediment removal @ between
Kinder and Jerome

0810 Arrive @ LF Cell Trailer

0844 1st Load of screened soil (clean)
is offloaded into dump area
at LF cell

0932 Clean soil for ramp
CONTINUES

1030 Equipment for moving
sediment was brought into the
cell.

1130 - 1300 Lunch break

1300 Observed sediment removal South
of Kinder.

1355 Photos of equipment in cell and
the SE ramp.

1419 The first load of sediment was
dumped off the SE ramp. Photos
of the first truckload approaching
the SE ramp and being dumped.
Also Photo of the first load of

9/26/01 (cont.)

sediment being dumped off the SW ramp.

1552 Begin grading the sediment toward the south slope.

1552 Photos of screened material in cell and grading toward south slope

1602 Photo of the excavator and the DE working with screened material near the SE ramp.

1609 Photo looking ~~East~~^{West} toward the SW ramp.

1620 Departed site.

Robert A. Currier

93

9/27/01

0752 Arrive, Sunny 52°F
Winds Light, South

CS-D ~~at~~ South of Kinder
is preparing for sediment removal

0801 Arrive LF site

0810 Both offloading ramps are operational. Sediment is stockpiled on both West + East sides. No spreading of sediment at this time. Screen is operational.

0905 5 Truckloads in 6 minutes

0915 Picture of Stockpile Load out + screen unit.

1042 WATER TRUCK on Access Road

1055 D-6 pushes Sediment on East side towards the N.

1107 Picture to N of Spreading Sediment on the East Side

1110 Picture to NE of Cell.

1154 Picture of East side LF of sediment placement next to Toe of slope

1207 START sediment placement along west side top of slope

CONT to P. 94

Day 1 (cont.)

- 1400 Observe point Filter Test
From Soil Stockpile, TEST PASS
The 5 minute Port Filter
- 1422 Screen Down, Sediment
Loading & delivery is ongoing
- 1506 Sediment is drier than
previous loads.
- 1602 John Fiore pushes sediment
stockpile on SW corner to the
west side toe of slope
- 1640 Depart Site

Thomas D. Buz

9/28/01

- 0830 Arrive site.
WIND STILL 62°F
- 0842 Unscreened sediment loading
starting this morning and being
placed on Floor from south to north
Per Golden Reg., 257 Dump Truck
loads to date.
Safe operations.
- 0912 Picture of UPWIND AIR MON. Station
- 0914 Picture of sump pump
recirculating clean water (brown)
temperate.
- 0942 Picture of Cell from SW
Ramp to the NE.
- 1107 Visit w/ Kevin Turner
- 1141 Break for Lunch
- 1217 Return. MAVERICK on Break
- 1310 Screen is operational
- 1405 Observe sediment removal
on Kinder
- 1511 Steady Progress
- 1615 Depart Site

Thomas Buz

10/1/01

0845 Arrive site

Maverick worked on Saturday
as planned

Sunny, cool 50°F

0942 Perimeter walk conducted OK

North toe-of-slope is 40ft away
from being covered.

Screen is down.

0951 Picture to South of sediment

Spreading activities

1000 Picture of LF Cell to the N.E.

1011 Pictured CSB adjacent to site
shot to the South.

1146 Depart For lunch

1217 Return 72°F West winds

1249 Work on-going.

1331 Floor of cell nearly covered

1410 Sediment Removal S. of Kinder
continues.

1620 Depart Site

Thomas Dwyer

10/2/01

Sunny 61°F, Light S. wind

0810 Arrive

0817 Tour site, Planning
weekly inspection today

0905 Going well

1014 Start weekly inspection
w/ Golden & Maverick Rep.

1105 Weekly inspection complete.
NO ISSUES AT THIS TIME.

1135 Kevin Turner arrives for visit

1151 Lunch Break

1227 Return from lunch

1309 Inspect electrical panel
Installation for sump system

1418 Picture of Site "M" stockpile

1507 Depart Site

Thomas Dwyer

10/1/01 Sunny 62°F, winds: West

0935 A24E

0940 Picture of ALLU articulated
screen developing window of clean soil
along North toe-of-slope.

0945 Picture of electrical panel
for Pump system(s).

1040 Picture of call to the NE

1057 Picture of site in stockpile.

1116 Sandra Arrives

Tour site w/ Sandra

1209 Break for lunch

Sanly to join The creek
South of Judith.

1233 Return from lunch

1240 Tour site "M" w Sandra Brown

1328 Sandra concerned w/ impacted
water in creek & sediment
stockpile contact water.

I explained that this project has
BMP's well designed and suited
for capture of impacted sediments.
She still does not capture the concept.

1347 Sandra departs site

1404 Allu screen continues to generate
screen sediment.

10/3/01 (cont)

1428 ALLU ~~continues~~ completes
toe-of-slope for N berm.
Generating screened soil for
Sump area.

1510 John expecting the President
of Solvia today

1538 Tour of Site "M"

1601 Tour of ~~the~~ CSO South
of Kinder

1630 Picture of Sediment loading
South of Kinder

1640 Depart Site

Thomas B. King

10/4/01 P.C. 63°F, 30% chance
0906 Arrive to Site

John F. reveals that sediment screen is to be cleaned and removed from site.

0941 Site "M" Stockpile is greatly diminished. Sediment has tracked-in well. Maverick will continue to load and place $\approx 2000 \text{ yd}^3/\text{day}$ and expect Site "M" completion in 6 days w/ good weather. Although, rain expected today.

0917 North Toe-of-slope screen material was Feathered-in and Tracked-in last evening in preparation of rain today.

0922 John Fiere says loading of sediment will stop during rain. Maverick will stop and perform maintenance. Once rain falls stops, Maverick will scrape the top layer of sediment within the cell and resume loading & compaction of sediment.

0928 Depart site to TTEMI office

Continued on next page

10/4/01 (Cont)

1530 Return to site after meeting.

1534 Picture of LF cell from SW offland ramp.

Additional screen soil was placed adjacent to SW ramp and along the East berm toe-of-slope.

Expecting rain tonight, so sediment placed in LF cell is well groomed, compacted and graded for rain to drain into the sump pit.

1601 Sediment from Creek

Just north of Site "M" sediment stockpile is being removed w/ long-reach excavator.

Site "M" stockpile has $\approx 50\%$ volume remaining at this time.

Picture of Site - M

1711 Picture of ALLU screen @ NE corner of LF cell on top of ~~screen~~ mud mats

1802 Expecting $\approx 1500 \text{ cyds}$ today

1815 Depart Site

John F.

10/5/01

Rain overcast 51°F Temp is dropping.

0751 Arrive to site

All sediment loading activities are shut down today. Only Equipment maintenance will occur today.

0809 Richard (Golden Rep) and I Tour the LF cell. No standing water is observed in the Cell.

0812 Picture from SE ramp to the NW.
Picture from SE ramp to the West
Picture from SE ramp of Site M
and decom operation of Screen unit.

0930 Depart SITE.

Flower King

10/9/01 P/C, breezy, 62°F

1231 Arrive Site

Per Richard, the site received 0.55 inches of Rain on Friday (10/5/01).

Due to more recent favorable conditions sediment within the LF Cell was determined sufficiently dry for resumption of work today.

1244 Picture of North berm
(minor standing water in small, localized area.)

Picture of West Berm

1406 Picture of LF Cell from SW Loading ramp.

1442 2 Pictures of Soil samples ~~flow~~ to the NW & SW.

1618 Richard & Eric conduct maint. on capillary collection pump.

1650 2 pictures 1 South & North of Kinder Lane

1800 Depart Site

Flower King

10/9/01 Sunny 55°F, rain tonight

0920 ARRIVE SITE

CS-D North of Kinder W.I.P.

0901 Picture of soil stockpile ~~to~~
to the North

1000 Picture of LFC cell from SW Ramp

1004 A11V is generating screened soil
for North berm

1135 Tour LFC cell w/ Bill Raynon

1321 A11V is generating screened
material for North berm

1430 Drive to Letton Iron site.

1503 Depart site

Thom D'Amico

10/10/01

1155 Arrived on site. Cloudy, scattered
showers, 61°F. Due to 0.39" of
rain last night and early this
morning, no activities are in
progress at the cell or the creek.
More rain is forecast for later
today and tonight. There is some
rilling on the slopes of the cell.

0930 Departed site.

Colt P. Currier

10/12/01 No sediment work today
OVERCAST 58°F

0930 Arrive

Per John F. all work
shut down due to rain yesterday.
Maintenance of Road & Equip.
for today. Keep up paperwork.
John called Kevin Turner
yesterday re: broken asbestos
H₂O utility line (4") by excavator.
John calls this a non-issue but
called Kevin to indicate that
pipe was in low risk area
and a clamp repair was made.
WATER MAIN was left on during
the repair.

1018 Picture of LP Cell from
SE Ramp
Picture of soil stockpile

1100 Depart site.

John Day

10/15/01 OVERCAST 58°F, Rain expected.

0751 Arrive

0752 Picture South ~~East~~ Catkin.

0811 Loading out soil from stockpile

0817 New rep from Golder, Jason.
Richard on vacation.
John returning today.

0819 A11U is generating screened
material for west berm.

0940 Depart for Letter Stock project

1340 Return to site

Work in progress

1400 Depart for DOE RUN

John Day

10/16/01

- 0935 Arrived on site. Sunny, strong breeze, 47°F. Segment D is excavated nearly all the way to Cahokia and is scheduled to be completed today. The stockpile is almost depleted and should be all gone by COB on Wed.
- 1045 Photo of cell facing NE.
- 1047 Photo of Segment D facing E.
- 1049 Photo of the Area working along the south slope.
- 1520 Departed site.
- Althaus: Currier*

10/17/01

- 0820 Arrived on site. Sunny, calm, 45°F. Work is continuing to complete Segment D at Cahokia. Stockpile removal is continuing. The material in the cell is somewhat wet and is being turned over. The pump in the NW corner is removing water from the low point.
- 1001 Photo of cell facing NE
- 1006 Photo of cell facing SE with swamp in foreground.
- 1017 Photo of cell facing SW.
- 1033 Photo of stockpile area facing NNE.
- 1057 Photo of excavator and remaining sediment at Segment D.
- 1412 Departed site.
- Althaus: Currier*

10/13/01

0815 Arrived on site. Sunny, breezy, 46°F.
Creek Segment D is completed and
the excavator has been removed and
decommissioned. Water from Segment was
pumped into the frac tanks last
night and is being treated and
discharged today. The stockpile
is still being removed. The Alon
has placed screened material along
the south berm and is now
placing screened material along the
west berm. As of yesterday, about
19,860 yards of material had been
placed in the cell.

0900 Departed site.

Arthur C. Curney

10/14/01 Sunny, 58°F

0930 Arrived on site. As of yesterday

X 21,230 yd³ of sediment was placed.

0945 Picture of soil stockpile

1006 Picture of LF Cell from SW ramp

Allu is screening soil along W berm

Soil is stockpiled in LF cell to

allow drying of sediment

contained in the cell.

1032 Picture of top layer of sediment
removed & loading from CS-B
(started this morning)

1033 Picture of CS-B w/ top layer
removed

1038 Picture of CS-B to the South
of top layer of sediment removal.

1142 Picture of soil stockpile.

10/22/01 OVERCAST 63°F

Rain expected tonight

0949 Arrive on site.

All sediment removal today comes from CS-B only.

Also is screening soil for N. Bern

1011 Picture of LF Cell from SW ramp

1033 Picture of CS soil excavation.

Maverick will remove impacted sediments from CSB invent today.

1103 Kevin Turner & Bill Bolen on site today.

Soil stockpile is gone.

1152 Picture of former soil stockpile.

1255 CS-B cleaned ~150' to the South.

1344 Picture of CS-B excavation.

from Jersey barrier near

Queeny. "Organo" smell is obvious, but no recorded on PID.

1502 Deeper excavation near

Jersey barrier is oil (refinery)

ladder w/ small amount of perched Groundwater.

1617 Picture of CS-B from East side

of Creek. John Fione reports that soil is "Full of copper".

1706 Depart site

Shawn Berg

10/23/01 65°F cloudy, Rain

1102 ARRIVE Light RAIN

Sediment is removed from

CS-B today until rain forces

a shutdown

1117 Picture of LF Cell from SW ramp

1144 Picture of CS-B from

Queeny Ave.

1317 Maverick is spreading

mulch on East side of creek

near soil stockpile.

No new rain fall yet.

1330 Loading soil from

former soil stockpile.

1429 Picture of former

soil stockpile.

1510 Not much excavation &

Loading of soil today due

to anticipated Rain that did

not come

1600 Depart site

Shawn Berg

10/24/01 61°F Cloudy rain expected
0830 Arrive on site.

Rain expected today so no
soil/sediment will be placed
into LF Cell today.

0850 Depart for Leften Iron

1100 Return to site

Sunny now. Maverick is
stockpiling impacted sediment
in CS-B adjacent to LF cell.
Picture of CS-B Midpoint

1130 Picture of East Bank
to the North showing
Site "G"

1145 Surveying the LF Cell today

1330 RAIN ARRIVES

Tarping soil stockpile in CS-B.

1400 Go Back to Leften & Secure

Poll Rep #6 for Art Currier

1430 Depart Site

23829 yds as of 10/23/01

Thomas Dwyer

10/25/01 Clear, cold, windy 45°F

0950 Arrive on site

Sediment from CS-B is to be
stockpiled for future loading
& removal. NO Sediment
will be placed into LF cell today.

1011 2 Pictures of CS-B Midpoint

1206 Depart site for lunch

1241 Return from lunch

1318 CS-B soil stockpiling
continues. No odors today

1504 Picture of CSB from East Bank
Looking North

1539 Over .60 inches of rain
yesterday. I asked John Fiore
to inspect all fences that
may have been damaged from
high winds.

1621 John expecting to load soil
into the LF Cell tomorrow

1728 Depart Site

Thomas Dwyer

10/26/01 Windy, COLD & Sunny, 52°F

0956 Arrive on site

Sediment removal from CS-B,
yesterday's stock pile's are being
loaded & disposed in LF Cell today.

1039 Pump from CS-B near Quarry
is being ~~relocated~~^{FAB} relocated to
best denature remnant rain accumulation

Picture to the south from Quarry
1047 "Orange" color is present during
removal of sediment from the
in vent to bottom of CS-B near
Quarry.

1058 Sandra Brown touring the site

1335 Sandra has two concerns

A) odor from creek

B) Contact water from CS-B

John Fione offers an explanation
and provides tour of pump
& treatment system.

1449 Maverick will remove geo fabric
and replace later.

1530 Picture of Site M w/ the truck

Picture of LF Cell from SW ramp

1539 Picture of CS-B near Quarry

1630 Depart Site

John Fione

10/27/01 Clear, cold, 34°F

0951 Arrive. Maverick has

placed Geotextile in CS-B

near Quarry Ave last night, no

picture yet (wait ~~until~~ until 12:00-2:00)

0912 Long reach excavator now

removing silt from Quarry Ave

Sump pit.

1043 1) Picture of CS-B sediment

removal, 2) Picture of CS-B from East bank

1022 Picture of LF Cell from SW ramp

1048 Picture of CS-B from SW ramp

1121 Picture of 20 mil poly

installation into CS-B.

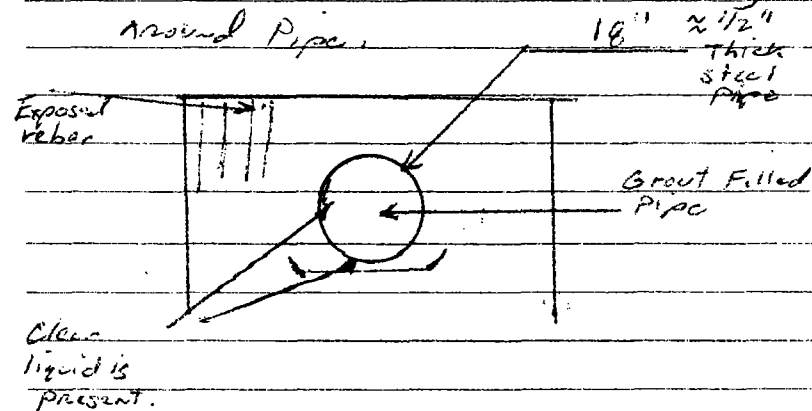
1147 Picture of Geotextile placement

1255 Picture of grout filled pile from

West bank of CS-B

1350 Picture of Technician cleaning

around Pipe.



10/25/01 (cont)

- 1446 Picture of stormwater sump
cleanout.
- 1502 Picture of Sump Cleanup
- 1503 Picture of Sump area upstream
of CS-B where Jersey barriers
are to be placed.
- 1530 Richard takes pictures of
overflow pipe.
I will request copy for
Kevin Turner benefit.
- 1615 Depart Site

John B.

10/29/01 Sunny, Clear 45°F

0851 Arrive on site. I contacted:

Eric Kenyon to seek approval to
deliver photos of overflow pipe
to Kevin Turner.

0917 Sediment removal from CS-B
continues. Stuck pile of sediment
in LF Cell is being placed &
compacted. A100 is screening
soil for East barn.

0947 John Fiore gave me permission
to provide Kevin w/ photos.

1029 Just met w/ Kevin to appraise

- 1) Existence & location of overflow pipe
- 2) Impacted sediments into Queens
Sump pit.

Kevin will contact John F and
Mike Light to discuss what's next.

- 1) Sample for VOA, Semi VOC's
other?

- 2) Perform headspace if
Solatia is not willing to analyze.

1106 Informed Eric of Kevin's
interest to sample.

1229 Picture of LF Cell from SW ramp

OVER

10/24/11 Cont. from 121

1312 Picture of CS-B to the South

2 Pictures of Quarry A-c Sump.

Picture of CS-B excavation ~ 200'

from Quarry Ave

1410 Phone call to Brian Williams,

Tom Morris, Karen Kinkelner

for SOP of Headspace analysis

for PID sample data

1551 John Birgo 312-856-8765

Responds w/ SOP # 2109 of

Section 2.2 of EPA Response Team.

1557 402 sample jar w/ Teflon

Lid & sample punt collects

jar 60-70% Full.

1610 Sample is shaken vigorously

for 60 second and allowed

to sit for 30 minutes

1641 Sample w/ Teflon punt was

perforated w/ PID Probe.

O₂ level dropped but no v.p.c.

levels show on PID

1732 Depart Site

John Birgo

10/30/11 Sunny, clear 55°F

0803 Arrive on Site

0816 On-going removal and loading of
soil from CS-B.

Survey results of LF cell = 15,000 yd³
compacted.

0826 Picture of installation of additional
60 mil liner near "outlet" pipe.

0851 Alou is placing screened sediment
into Sump collection p.i.t. (Picture)
4 pictures of CS-B removal
from East Bank of Creek.

0901 Picture of LF Cell from
West berm

1011 Met w/ Kevin to discuss the
headspace sample results.
Kevin called Eric inquiring into
status of "over-flow pipe".

1107 Personnel monitoring indicates
a volatile concern.

Note: Carbon Tet? PCE?

PID Readings do not

sustain. All readings were
instantaneous.

10/3/01 (Cont. from p. 123)

- 1121 Picture of CS-B
excavation N 500-600 South of
Aveny Ave.
- 11410 Site work shutdown due to
breakthrough on respirator cartridges.
- 11455 Eric is instructed by John
to cover the area w/ plastic
and move down stream of area
generating strong odors.
- 11537 Picture of plastic covering
sediment with strong odor.
- 1612 Work resumes
- 1641 Maverick will rent a 40' manlift
to be delivered tomorrow.
- 1722 Depart Site

John Fiore

10/3/01 Clear, Sunny 55°F

0811 Arrive on site

Message from Rob Watson (IEPA) re
Site visit for Tomorrow 217-524-3265

0827 Talked w/ Rob. He is coming
Tomorrow, Maverick was notified.

0855 3 Pictures of CS-B sediment
removal.

0943 Kevin Turner Arrives on-site.
John Fiore will develop
permanent records (GPS) for
location of Over Flow pipe.

1028 A100 is screening soil for
Sump pits.

1117 Picture of MANLIFT ready to apply foam.

1151 Picture of CSB 300' downstream Aveny

1205 Sandra Brown called she wants:

- 1) Sample
- 2) Survey
- 3) Block off Flow of G.W.

1239 Picture of CS-B at field person
Placing liner up the west Bank

1425 Picture of CS-B geotextile placement
on top of liner.

CONT Next page

10/3/01 Cont from P. 125

1520 Sandra Brown called me again - say's she spoke w/ Kevin Turner and he agrees with her on 1) sampling 2) antisep collar 3) GPS or Survey the "overflow pipe". Also, she will visit the site on Friday 11/2/01.

1529 I contact Kevin to inform him of above. Kevin instructs me to contact John Fiore and request him to meet w/ Sandra and listen to her concerns.

1551 Meet w/ John to pass along request from Kevin, also:
1) Survey the "overflow pipe"
2) Install antisep collar
3) Sample the source
John informs me that his client is not willing to sample because request # 1 & # 2 will be performed.

John places a phone call to Kevin Turner.

1623 Depart Site.

Thom Day

11/1/01 Cloudy, 30% rain, 62°F

0802 Arrive on site

0816 Rob Watson calls to check on rain at the site. He will visit the site today.

0832 1" minus (Dense grade) rock is applied to geotextile in CS-B channel. Sediment loading and disposal continues from CS-B ~ 300 south of Queeny Ave.

D-4 Dozer pushes rock in CS-B

Picture of CS-B from Queeny

Picture of D-4 spreading rock.

1022 35 rolls of

delivered to site today

1055 Rob Watson, and others

From IEPA Arrive for site visit

1116 Depart Site

1300 Arrived on site

1600 Departed site.

Arthur Gomez

11/21/01 Sunny, 52°F

0812 Arrive @ Site

Sandra Barr expected today

0833 John F. say's he will not collect samples today

0841 Phone call to Bryan Williams to discuss sample Bottles.

0919 Depart Site to obtain bottles from Storage Facility.

1117 Return w/ Bottles

1205 Sample collection going slow, only 3 VOA's collected at this time

1414 Pipe not yielding much sample. A Plastic corkation catch tray was installed to collect sample into 5-gal Bucket,

1619 Bucket in place.

I will return on 11/3/01 to collect the next series of water from pipe

1730 Depart Site

Thomas Barr

11/3/01 Sunny 61°F

1002 Arrive on site

1117 Samples collected

80% complete. I will resume on 11/5/01

1310 5 pictures of pipe & site

1447 Depart Site

Thomas Barr

11/5/01 Sunny, clear 52°F

0807 Arrive on site

0851 Collect final volume of
sample for Kevin Turner
for delivery to the letter from
Project site.

0942 Sediment removal from
CS-B midpoint.

1010 Depart for Letter Site

1117 Return to site.

Picture of CS-B excavation
from East Bank of creek.
Picture of CS-B looking South.

11412 Pictures of LF Cell from
South west Ramp.

1417 Ongoing excavation of CSB
continues.

1610 Depart site to return
bottles to Storage Location

John Bay

11/6/01 Clear, 47°F

1012 Arrive on site

1033 Picture of SE Ramp

Picture of SW Ramp.

1041 Picture of lower end of
CS-B sediment removal.

1121 Picture of CS-B sediment
removal from midpoint of
CSB.

1149 2 Pictures from NW corner of
LF Cell.

1331 Depart for Letter Iron

1412 Return to site.

1441 2 pictures of Allow screening
soil near the S, W ramp

1650 John starts cleaning of pipe prior
to placement of concrete/grout patch
on "overflow pipe".

Too dark to complete the
work tonight.

1730 Depart site

John Bay

11/17/01 Sunny 60°F Rain expected tomorrow

0825 ARRIVE ON SITE

0906 Picture of CS-B Lower end
sediment removal.

0937 Plug for overflow consists of:

1) 5 Bags of portland cement
mixed w/ WATER

2) Concrete mix is inserted
to 6' up into the pipe.

3) Last bag of concrete is mixed
w/ Bentonite for swell & seal.

1032 Picture of Concrete being
inserted.

1145 Picture of Bentonite Seal
Installation w/ 2x4 Board.

1227 Picture of "Quick Plug"
Concrete cap 2nd coat

1411 Picture of 3 coating of
Quick drying cement.

1515 Picture of Richard performing
4th & Final coating of "Quick
Plug cement.

1530 Depart Site.

J. M. B.

- 11/8/01 Sunny, RAIN Expected. 48°F
0930 Arrive on SITE w/ Ron Carroll
0917 Picture of the Southern end
of CS-B Sediment removal.
0922 Picture of Completed Grout Plug
of overflow PIPE.
0956 Depart Site
(Take Ron Carroll to meet
Kevin Turner)
1101 Return to SITE
Ron Carroll Departs
1317 Picture of LF Cell from
SW Ramp
1328 Picture of CS-B Midpoint
looking to the NW.
1448 Picture of CS-B Southern end
Near Judith Lane.
Little rain today, operations continue.
1502 Picture of sediment removal
(stockpile) from CS-C just South
of Judith Lane.
1509 Picture of CS-B just North of
Judith Lane

- 135
11/9/01 Cold, Clear 41°F
0930 Arrive on SITE.
0959 Picture of LF Cell from
SW Ramp.
Picture of LF Sump area
Picture of North Berm
w/ Plastic cover on North
Berm Linear soil stockpile
1021 Picture of South end of
CS-B Sediment removal
1024 Picture of "overflow pipe"
after completion + Full
cure of "Quick Plug" concrete.
1041 Picture of CS-B South end.
1107 Depart Site
1349 Return to SITE.
1548 Picture of CS-B Southern
end showing geotextile blanket
1559 Picture of CS-B Midpoint
1606 Picture of CS-B Midpoint
grading + excavation.
1618 Maverick will work on 11/10/01.
No tetra tech coverage will occur.
1658 Site is stuck in LF Cell.
1733 Depart Site.

Thomas Berg

11/12/01

Sunny, Clear 45°F

0907 Arrive on site, met with

Rich

0920 Picture of cell from SW

Camp

0935 Picture of cell from SW

Camp looking East. Fly

Ash going in for minor

stabilization of moisture.

Dust problem wind heading

Northwest. Spoke with Maverick (Erik)

to keep movement slow and low.

0945 Picture of Beelman Truck unloading
ash.

0950 Picture of dust cloud moving
across LF. Not going off site.

0955 Spoke with Tom Diaz regarding potential
dust problem. Luke from ER handles
air monitoring. As long as Erik is
made aware of issue and tries
to mitigate problems.

1020 Left to meet Kevin Turner at left on
site.

1115 Back on site. Checked excavation
South of Judith.

1135 off site to office

R. C. Moore

137

11/13/01

Sunny, Clear 55°F

0850 Arrive on site

0855 Met with Erik Kemper to discuss
yesterday afternoon + this morning -
no significant events. Fly Ash effective

0931 Picture of CS-B just south of
Judith Lane.

0935 Picture of CS-B North of Judith
Lane. Placement of liner complete.

0940 Picture of CS-B facing NE. Liner (geo)
being constructed

0942 Picture of CS-B facing S. Road
cleared. Grading complete. Contouring
creek bed.

0955 Picture of CS-B Pipe. Extra grout
looks solid. No leaks.

1010 Spoke with Erik. Meeting of URS and
Solutia this morning to discuss design.
Maverick working from Cahokia St.
N along CS-C - eventually meeting in
the middle from CS-C S of Judith Lane.
Filling in LF cell in SW corner today.

1035 off site to Cahokia RD. + CS-C

1130 On site. Spoke to Erik. moving stockpile
from CS-C and building road.

11/13/01 (Cont)

Should start first cut tomorrow on the next day in CS-C.

11:45 Spoke with Tom Binz regarding road access. Not limited to Judith, but surrounding areas. Tom will drop by office after lunch to take picture of CS-C stockpile excavation.

12:05 Ron Carroll off site.

11/14/01 Sunny, clear 60°

0910 Onsite. John, Marathon - Ashland at CS-C near Cahokia for excavation near pipeline.

0930 At Cahokia St., pipeline reps and crew in middle of CS-C - waiting for smaller hoe to excavate near pipeline.

0937 Picture of CS-C looking South. Working on West wall.

0955 Spoke with John regarding excavation. Task is going well. Pipes already exposed. Moving along from center to south end of CS-C with access road already in place.

1010 Spoke with Tom Binz. IEPA (Sandra Bron) will be on site @ 11:00.

1016 Picture of CS-B facing East - newly geo-lined area w/ storm water diversion in place.

1021 Picture of LE cell from SE Ramp looking along East Ditch.

1050 Sandra Bron onsite. Met in parking lot before signing in.

11/14/01 (cont.)

1110 Picture facing NW of SW Ramp
Unloading soil from CS-C.

1130 Tom, Sandra, Ron on South Berm
discussing odors.

11:40 Viewed leachate collection area

11:45 Spoke with Rich regarding stockpile
along N Berm - odiferous.

11:50 Sump area N near Queeny. Sandra
questioned discoloration of water.

I mentioned discussion with Rich that
Iron may be cause of discoloration.

Sandra disagreed. We decided to
take up with Kevin. Groot pipe
looks good.

11:59 Picture of discolored water in
sump

12:12 Tom wants to review pictures
from 2 weeks ago to find photo
of 80 x 40 ft fabric (near end
of SE ramp out) for precipitation
photo looking East of standing water.

12:30 RAC off site

[Signature]

11/15/01 Sunny, warm 60°F

1039 On site

1051 Picture of sump facing East.

1057 Spoke with regarding movement
of material in LF Cell. Sizing
material on N Berm working
toward leachate collection.

Today might start building
up leachate collection system
- more likely tomorrow.

1105 Picture of LF cell facing N
towards leachate sump.

1220 Off site to view work from
Cahokia St. - CS-C. Lunch.

1320 Picture of CS-C looking North
from Cahokia St.

1330 Walked perimeter of LF cell.

1350 Ron Carroll off site

[Signature]

11/16/01 Sunny, warm 65°F

1200 Ron Carroll arrived on site.
John having lunch. Spoke
about the schedule and tasks
this weekend. No plans to
deviate from plan to continue
with CS-C - taking advantage
of the weather. Working on
Saturday as well.

1230 off site

R. Carroll

11/19/01 Overcast, 45°F

0935 Ron Carroll on site.

1000 Picture of CS-C after weekend
sediment removal activities. Facing
South from Judith.

1005 Picture of LF Cell facing West from
East Berm.

1010 Spoke to Erik. Planning on
completing CS-C by end of
Nov. starting CS-F hopefully
1st or 2nd week of Dec. -
still having clearing and
ancillary things to do.

Saturday 11/17 work went
smoothly. Finished South end
of CS-C near Calhoun. No
hauling today. Will haul
20th and 21st.

1045 Picture of CS-C from Calhoun
looking North.

1125 off site

R. Carroll

11/20/01 Sunny, Cold 38°F

- 0905 Arrive on site. Meet with John. Hauling today from CS-C, but not as of yet. Spoke with Rich. He pulled 18 samples from CS-B week had for Maverick yesterday when Ron Carroll on site.
- 0945 Picture of LF Cell on North Berm looking at sump - leachate collection system. Picture looking S at down of dozer. Picture looking SE at cell - rough graded.
- 0957 Picture looking from Judith at CS-C progress.
- 1126 Picture looking from Judith at CS-C stockpile loading.
- 1205 Lunch on site with crew
- 1230 Spoke Tom about status of site work.
- 1345 Review of CSC excavation from School St.
- 1350 Picture of CS-C removal looking East / South East. Picture of small loader.
- 1355 Off site

R C see

11/21/01 Sunny clear 40°F

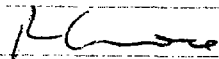
- 0930 RAC arrive on site
- 0941 Picture of CS-C facing South. Hauling appears to be slowed by lack of sufficient entry to temporary road.
- 0951 Picture facing NW of LF Cell
- 1049 Drive to School Rd. for observation of CS-C excavation.
- 1104 Picture looking S/SE at stockpile of CS-C removal.
- 1108 Picture of barrier off School Rd. facing East. Looks like easement.
- 1130 Off site. Candy said crew done @ 4:00 PM until 11/26/01. R C see

11/26/01 Rainy 50°F

1210 RAC on site. Light rain. Removal in progress. Rain not factor as of yet.

1:59 Rain picking up. Crew shut down in CS-C. Doing work in cell.

14:30 Off site

R 

11/27/01 Cloudy 45°F

1200 RAC on site. Spoke with John.

Depending on weather, should be done with CS-C by Saturday 12/1/01. Continue clearing & prepping CS-E - should start excavation in approximately 2 weeks.

1215 Sandra Brown is on site for a meeting with USEPA and 2 persons from CH2M Hill.

1235 Spoke with Tom. Will stop by site.

12:45 Met with Sandra briefly.

1250 Looked out at CS-C on hold for lunch.

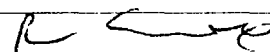
1315 Met with Sandra & Mike (USEPA), Tom Biz to discuss pipe in CS-B. Diverted questions to Kevin.

1340 Walk through of CS-B & LF Cell.

1430 John met with IEPA & USEPA reps to tour site & discuss pipe in CS-B.

1500 Spoke with John about him getting a copy of snap photo from Kevin of CS-B. Clear with Kevin.

1515 Off site

R 

11/28/01 Cloudy Cold 30°F

- 1305 RAC on site. 100' of CS-C left to excavate. John hoping the weather clears for tomorrow to finish by week's end.
- 13:15 Spoke with Tom Bize - will drop off equipment to left bank site after leaving Dead Creek.
- 1345 Left for left bank to meet Tom and Kevin. Kevin ok'd my passing a photo of CS-B sump area w/ pipe - analytical results from pipe to Maverick.
- 1358 Left for Dead Creek
- 1410 Picture looking South at CS-C. Crew positioning equipment to avoid problems with rain.
- 1415 Back on site. Met with John
- 1450 Spoke with John about pumping system for CS-C standing water. Everything is functioning. Maverick installed silt fences for last 100' of impacted sediments. Wet weather expected in next two days.
- 1505 off site

R. C. C.

12/3/01 Sunny Warm 60°F

- 09:45 RAC on site. Results from CS-B piping have been forwarded to John. Erik said that they are hoping to finish CS-C today or tomorrow.
- 1035 John feels area near church on Hte 3 may be done sometime this week - weather permitting. This is a CS-F area, but the main stretch won't be for 2 weeks or so.
- 1100 Picture facing S of CS-C near completion.
- 1103 Picture facing N of CS-B from Judith. Standing water from last week's rain fall.
- 1110 Picture facing NW from S berm of LF Cell at cell. Maverick using quarry rock instead of fly ash to minimize dust.
- 1155 Tom Bize at site. Discussed changes to sampling frequency.
- 1250 off site to CS-F church.
- 1301 Picture facing SW looking at CS-F stockpile - excavator.
- 1330 off site

R. C. C.

12/4/01. Sunny warm 68°F

1225 RAC onsite. CS-C main excavation complete. Touching up sidewalls for placement of geomembrane.

1400 Site walk. Water still on creek & geomembrane bed.

1425 Picture from Judith facing South at CS-C.

R L

12/5/01 overcast warm 65°F

Windy

1100 - RAC onsite. 100,083 gallons of leachate from last week 11/24/01 flow meter installed. Treated 96,000 gallons since Monday 12/3/01 from cell. Nothing from creek.

1125 CS-C is complete. Removing ~~325~~ unit today. Pulling samples next week from CS-C. Next two weeks pulling samples. Crew shut down last full week of December (week of Christmas). Points 14, 15, & 16 in CS-B sampling went done when water goes down.

1230 Picture of CS-C from Judith facing South. Completed excavation

1232 Picture of 315 unit being deconid.

1240 Picture of LF cell from S berm.

1325 off site review S end of CS-C and CS-E prep.

1343 Picture looking SW at creek bed after new box culvert in CS-F.

Maverick shoring up haul road.

Drove length of road parallel to CS-E.

End near water works off Levin Dr.

1400 off site

R L

12/6/01 Overcast 50°F

1004 RAC on site. Rain last night. Fabrick maintenance vehicle stuck at CS-F area where clearing is going on. Moving stock piled material today.

1030 off site

1405 RAC on site. John out sick.

1425 Picture facing NW from S berm at LF Cell

1435 CS-F. met with Erik regarding sampling next week. TCLP's will be done in addition to Totals. Speak with Kevin regarding frequencies

1440 Picture of stockpile from CS-F near church

1500 met with Tom Binz to discuss sampling protocols.

1515 Back on site

1530 off site

[Handwritten signature]

12/10/01 Sunny 40°F

0930 On site. Area between Pk. 3 & Cargill RD. done over weekend. Today working on area b/w Cargill & box culvert. After box culvert, dewatering is an issue. Beaver dam removed so depth reduced.

Erik going on vacation this week.

Another replacement on site to do sampling tomorrow. Stake off sampling locations today.

1015 Area CS-F at church. Picture (7) facing SW at excavated creek bed.

1035 Spoke with John and Erik about work over weekend. Church wanted to pave lot, so crews worked until 8:00 pm Saturday. Changes in sampling plan to be discussed in a meeting with Erik today. Picture (8) facing NE at stockpile from area to N of box culvert. Picture (9) facing SW of drained creek bed. Drove in area being cleaned along first 300' of CS-F with Rich.

1100 Back at field office. Survey Phase 1 36,622 y² computer per Rich.

John A. Fiore
Construction Manager

jfiore@maverick-cm.com



MAVERICK
Construction Management Services, Inc.

Delayed 11/08

Erik Kemper
Construction Manager

ekemper@maverick-cm.com



MAVERICK
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2890 Woodbridge Ave

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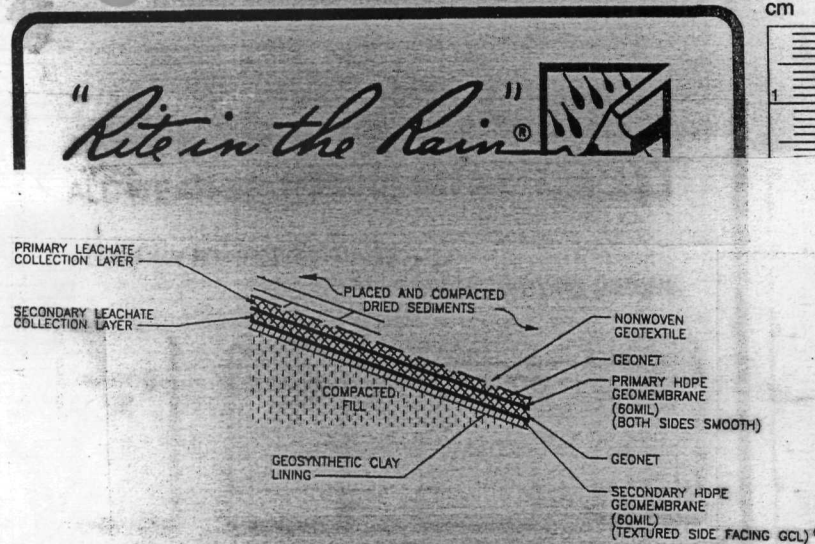
Sauget Area 1 Site
15 Judith Lane
Cahokia, IL 62206

TEL: 618-332-2691
618-332-2713
FAX: 618-332-2837
CELL: 617-285-3241

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CELL: 314-324-5332

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FAX: 636-922-9513



NOTES:

1. NOT FOR CONSTRUCTION.
2. LAYER THICKNESSES SHOWN ARE COMPACTED THICKNESS.

SCALE = N.T.S.

PREPARED FOR: SOLUTIA	Drawn: W. WEBER	PROJECT NAME: SOLUTIA INC. SAUGET AREA 1	FIGURE: 4-2
JOB NUMBER: C100004051.00	Design: GARY WHITLAND	DRAWING TITLE: SIDE SLOPE LINER SYSTEM DETAIL	
URS Corporation Southern 7850 West Courtney Campbell Causeway Tampa, FL 33607-1482 No. 00000002	Checked: GARY WHITLAND		
	Date: APRIL 2, 2001		

COPIER PAPERS

GRID SHEETS

POLY-CLIPBOARDS

Field data ... if it's worth collecting, it's worth protecting.

[illegible]

Tacoma, WA 98424-1017 USA
(253) 922-5000 • FAX (253) 922-5300
www.RiteintheRain.com

12/10/01 (Cont.)

1310 Drove to CS-F area. Stockpile removed almost complete.

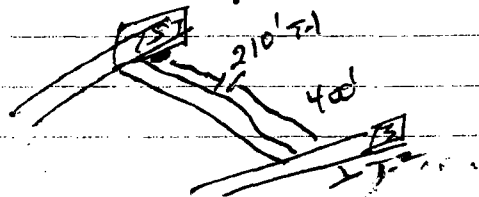
1330 Kevin Turner onsite. Explained the importance of the time variable when performing the VOC sampling. He & John drove to see CS-F near wetland. Plan is to begin excavation south of new culvert towards wetland.

Dam flow at bend, pump from upstream areas into dam area w side of new box culvert. Leap frog after that - dam - pump...

1345 Rich and Erik making first stake S at CS-F then moving North.

1400 Spoke with John. Kevin is ok with sampling plan. Not going to use the Egan sampler for VOC. Pull sample from compressor timely with no head space, load in ice chest quickly. Kevin stressed minimal handling time in sample handling.

1430 Rich & Erik began staking off CS-F. Picture facing NE. Placement of culvert affected 400' placement of points



12/10/01 (Cont.)

1500 Walked off CS-E. Questions arose as to whether culverts are calculated into sampling distances.

1545 Kevin Turner specified keeping the # of samples, just change frequency. Document changes.

1600 Spoke with Erik & Rich about CS-B frequency change. 2 TCIPs per letter don't have to be from remaining 3 points. No TCIPs were done, so one can be pulled at CS-B, T14.

1615 off site

Rich

12/11/10 Sunny = 45°F

1245 Arrived at CS-F. 3 trucks lined up on levy. Excavation being done on CS-F b/w N/S culvert & bend.

1250 At office. Maverick replacement for Erik, Ken Cofferly. Discussed sampling plan with maverick. Golder. Footage is less than anticipated, so sample frequency is less.

1340 Observed Rich on placement of stakes at CS-C.

1420 CS-C stakes done. CS-C-T1 will be TCLP.

1430 At CS-F for 1st sampling.

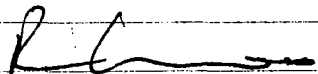
1445 1st event CS-F-T2 in front of church

1448 Done with 1st event

1529 Back on site. Observed samples being prepared & pulled from bags.

Discussed TCLP at CS-F near bend.

1620 off site



Photos from Rich!

12/12/01 Rain, cold 35°F

1145 Arrived on site. Discussed sampling events. Stopped raining for the time. Ken Cofferly updated drawings to reflect placement of TCLP points.

1210 Lunch

1230 Back on site. Met with Ken. Again to discuss additional TCLP points at CS-D and CS-E. Rain started again. Rich and Erik on site again. We discussed additional and updated sampling plan.

1325 Arrived @ CS-D for sampling.


1407 Done with CS-D sampling.

1445 Samples being placed into jars.

Observed sample media transfer.

1510 Spoke with Erik about possible problems tomorrow with rain.

1530 off site



Photos from Rich!

12/13/01 Overcast 45°F

1045 Onsite. Met with Rich & Erik about CS-C sampling. 9 samples + duplicate. Samples prepared & containerized.

1200 Erik went to CS-F to view excavation to determine if ~~any~~ ^{any} ~~more~~ will be done today with recent rain yesterday hindering operation.

1300 Discussed additional sampling efforts with Ken, Erik, and Rich. Added TCLP of bed in CS-4. Will sample in CS-E tomorrow as much as they can.

1416 Marked up recent drawing with added sample points, included CS-B T&S TCLP. Requested 11" x 17" copy of site sampling map from Ken.

1445 Spoke with Ken again about sampling tomorrow. Starting at approx. 8:30.

1450 Off site

RC

12/14/01 Cloudy 35°F

0800 RAC onsite. Ken and Rich discussing rain from last night. Incident near Rk. 3 and 157 w/ motorist hitting the sign for construction. Ken getting information from police.

0820 Rich and I drove to CS-E to view ^{Picture facing E} standing water in creek bed. Not able to pull samples because too deep & wide - not representative.

0845 Ken arrives at area. Agreement is made to wait one hour to see if water pumps down enough to sample.

0900 Back on site trailer

0932 Left for CS-E to observe pumping

0945 Observed pumping from Edgar. Only 2-3" in last hour. Not good sampling protocol.

0950 Observed CS-F S of new culvert. Picture looking SW at creek

0956 At LF cell checked Leachate pump ^{is 24,000 gallons} pumping ~~24,000~~ ^{in last 24 hrs.} per Rich.

1015 Off site

RC

12/18/01 Sunny 50°F

- 07:30 Had a call from Rich saying
might sample CS-E depending
on whether can pump down.
11:30 On site - met with Art & Maverick
Rich from Golder wants to
sample an extra point in CS-E.
2:30 off site

R. Cline

12/18/01 Overcast. Drizzle 40°F

- 07:59 RAC onsite. Rich & I
sampling GW wells.
09:15 To CS-E to get remaining samples
Picture facing N of sampling area
Picture of standing water of stream
10:00 Back from CS-E sampling
10:15 Poring CS-E 7, 8, & 9. Pictured Crew facing
W.
10:40 Back from CS-E
11:45 off site lunch
12:30 Back on site.
13:40 Drove to GW wells where Rich sampling
13:50 Picture facing SW of CS-E excavation
13:55 off site

R. Cline

12/26/01 Sunny Cold 25°F

0730 RAC on site.

0810 Observed activities in cell.

0830 Picture looking NE from cell berm.

clearing excavator segments from CS-F
P-3 Spoke with Tom. Looking for sample rest of
cell this afternoon: possibly CS-B if
pumps down.

0843 At CS-F, still clearing stockpile from
excavation last week. Added new access
ramp to levy.

0845 off site

1230 RAC on site. CS-E not ready for sampling
CS-B pumps - ready for sampling.

1245 Down CS-B again to observe pumping.
Down to CS-E17 area to observe pumping.

1315 At CS-F area - equipment being serviced.

1325 At mobile unit to observe cell sampling.

1 R. L. Jett from Glacier zone.

1300 At CS-B - started CS-B14.

1350 Down with B14, 15, 16 - 17 samples but not
needed B-6 better spot than B-7 due
to water.

1420 Down with CS-B sampling.

1505 Off site.

[Signature]

12/21/01 Sunny Cold 30°F

0759 RAC on site

0815 Spoke with Rich & Erik. Going to
use Shelby sampler for CS-E17-18,
possibly CS-F-1 unless no water present
in creek. Picture 1 & 2 of CS-E sampling.

0930 Done with sampling

0940 Back on site, sampling containers
prepared.

1015 Completed sample containerization.

Rich to burn a picture of Shelby
tube sampling from CS-F. Camera
memory full. Back onsite 1/2/02

1030 off site

[Signature]

1/2/22 Sunny CLE 20°F

0855 Erik calls. Spoke with Candy
John. Run out until tomorrow. Erik & Rich
off site.

0930 Erik & Rich still off site. Work on
excavation to resume tomorrow per Candy.

1000 John facing N from Junction of CS-B.

1000 off site

Rich

1/3/22 Sunny CLE 16°F

0857 PAC on site. Met with John Fiore about
schedule today.

0930 Spoke to Rich, CS-F being excavated near
dogleg. Site work began.

1000 Picture from well SE camp; facing i.w.

1100 Picture of logging site

1105 Drove with Rich to east part of excavation

1107 Picture of sediment removed facing west

1110 Picture of creek bed facing north

John planning on 57 weeks (1st week of
February) to completion of excavation. Plan
is to begin at current position downstream
working up stream, while also working
down stream from dogleg. CS-F 25%-35%
complete, but with colder weather things
slow down. Spoke to Rich about marking
off sampling points & planning to pull samples
as material removed.

1145 At office, John said starting F. near dogleg
tomorrow.

1200 off site

Rich

1/4/02 Sunny 15°F

0859 PRC onsite. John offsite. Erik & Rich onsite. Requested to speak with Erik about change in work plan to back tanks. No precipitation since before Christmas. Also need to discuss sampling plan - data from December sampling events.

0927 Site work

0935 Picture of dogleg at CS-F facing N.

0937 Picture of CS-F from dogleg to box culvert. Sediment being mixed with quarry mix to stabilize moist material.

0950 Back at trailer. Spoke to John on cell phone - back by 1015 or so.

1010 Spoke to Erik. He & Rich are working on GPS for sampling points all day.

1045 John explained that Solatia still has data - validating results. Dogleg dam built with soil removed from hole dug near current work area at CS-F. No siltants used!

1110 off site

[Signature]

1/8/02 Sunny 50°F

1230 PRC onsite. Performing sampling in CS-F this afternoon. After speaking with John and Rich this morning (~1000) plans were made to do sampling event. John said nothing else substantial besides sediment removed has occurred - no problems or concerns.

1305 Drove to CS-F to observe excavation. No activity at main staging area. Crews not back from lunch yet.

1345 Picture of cell from S berm facing N.
Picture of cell from SW ramp facing E.
Picture of cell from SW ramp facing N.

1350 Erik & Rich performing GPS on prior sampling points. Will be sampling in CS-F by 1415 or 1430.

1359 Arrived CS-F, church parking lot

1410 Erik & Rich done with GPS. Picking up vehicle - driving to sample points in CS-F.

1425 Begin sampling CS-F T51 (TCL4)

1428 Picture of creek channel facing SW.
Picture of Rich sampling taking w.

1435 Done with F5

18/10/02 (Cont.)

- CSF-T14-1
1445 ~~1445~~ (TCLP) sample started. Churned
to sandy material, whereas site operation
former silty/clay (Black Brown).
1452 T14 done. Picture facing W of T14
1456 T13 began sampling events. M. fern &
frozen. Taking time to sample creek
at 1st. Dark Brown. Rich - Erik
have stake through frozen top
layer.
1502 Sampling T15 done. Picture facing SW
of T15.
1520 Back at truck. Rich - Erik pulling
sample from cell 1/3000.
1534 Rich preparing samples for shipment.
Next round of sampling, probably Thu/Fri
Intervals at 350'. As working in,
CS-F-T13-1 & T6 next points.
1547 off site

1200

17

11/10/02 Sunny 50°F

0945 RAC on site. Sandra Bron scheduled
for 1030 on site.

1025 Rich explained that removal slowing in
CS-F due to sloppy material from warm-up.
Waiting more rock to stabilize.

1030 Tom Bine on site to pick up equipment.

1035 Sandra Bron called running late 1100.

1100 Picture of WWTs weatherization work.
Constructed building to keep pumps & lines
heated. Picture of insulated module
that is not insulated on inside like
free tanks.

1102 Sandra on site. Sandra has only
one set of analytical results from
WWTs - supposed to run every 24 hrs.
during start up? Check with Kevin
& John. Sandra reviews drawing of
creek sampling.

1130 Done around cell.

1145 At CS-F. Rich doing photo of
settled water.

1203 Sandra asked John for water samples.

Andy will provide information.

1215 Done to end of CS-F. Picture facing

1/16/02 (cont.)

NE of end of upstream excavation long reach
channel, showing small channel split to
channel on drainage.

1235 Picture pump area. Water from CSF
being pumped into wetland area a 1500 F²
Picture facing NE of pump station area.
Picture facing SE of excavation - stockpiled
sediments.

1240 Picture of wetland area where pumps
= loss from creek discharge.

1250 off site

1/16/02 Chazy 40°F

0855 PAC onsite. Met with John No
significant events in last five days.

Met with Rich, some news -

F6 & F7 points are ready for
sampling.

0815 Picture facing NE of xomak
creek

- Picture facing SE down stream.
Crew current position

0817 Picture farther down stream facing NE.
Picture facing down stream facing SE,
looking at pump station.

0825 Minor accident at 157 Mile 3. Truck was
hit by woman driving 4-door chazy.

0835 Picture of cell stockpile facing N.
Picture of stockpile in cell facing W.
Picture from SW ramp facing E
Picture from SW ramp facing N.

0840 At WWTs. Rich explained winterization.

0930 Rich piled 2 samples from CSF.

1020 At end of F. John operating 322
cleaning up area. Probably not pulling
sample from this area today.

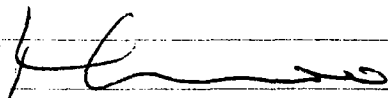
1026 Picture facing NE of creek

1/16/02 (cont.)

1027 Picture of pump area facing W.

John said additional clearing today.
 Hauling stockpiled sediments - mixing
 with limestone for stabilization.

1030 off site

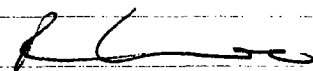


1/18/02 Sunny 55°F

1315 RAC onsite. No operation today.

Drove to CS-F to observe work done
 earlier in week since 1/16/02. Need to
 speak with Merrick Monday about
 placement of silt fences near S
 end of Segment F.

1345 off site



1/21/02 Sunny 45°F

1245 On site. Maverick is out to lunch. Travelled to cell to observe work. Picture facing NW of LF cell. Stock piled material from CS-E.

1314 Picture from levy near S ramp of excavation location currently conditions very wet today. Difficult to drive - walk in work area.

1325 Picture from Sample Point CSF-T11-1 facing N. Picture from T11 facing S.

1331 Picture from T9 facing N. Picture from T-9 facing S.

1335 Pictures starting from N to S. Panoramic showing work area.

1350 Spoke to Eriler and Richard about current excavation activities. Currently, removal is limited to area around T7-8 and T12-13.

Rich pulled points T6, T7 and T13 last Friday due to pumping of upstream areas - possibility of precipitation - flooding of sample area. No problems encountered.

Rich was able to walk across channel.

T8 is available for sampling, but waiting until other points available. Not desirable

1/21/02

To send only one sample and other significant events include recent automation of barbed collection system. After to meet with Richard on 1/22 or 1/23 to discuss activities.

1430 Off site

[Signature]

1/22/02 Sunny 40°F

0835 RAC on site. Spoke to Erik with manerick. Loading out trucks this morning with stabilized sediments from CS-F. Working in SW portion of cell face this morning.

0905 Observed unloading of sediments in cell. Picture of cell from SW ramp facing NE. Picture looking N from SW ramp.

0940 Drove along CS-B observed CS-B sump area at north part of segment. Drove along CS-B to observe liner & sediment disposition. Integrity of liner / geo membrane is intact.

1015 Observed CS-F sediment removal activity.

1030 Picture of CS-F channel facing S downstream. Picture of standing water upstream from dogleg. Water has discoloration.

1100 Drove length of levy to furthest point near pump station. Observed future work area.

1115 Drove back along western levy to

1/22/02 (cont.)

observe operation from west side.

1125 Area where water is being pumped is pooling.

1205 Off site lunch.

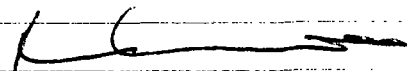
1237 Back on site. Replaced head lamp & wiper blades on EPA vehicle.

1300 Reviewed Deep Creek Support Sampling Plan.

1343 Rich & Erik performing GPS on GW sample points.

1410 Observed removal activities at CS-F. Stockpiles continue to be mixed w/ limestone; loaded out.

1515 off site.



1/23/02 Overcast
60°F

On site. Erik not sampling yet.
Called Sandra Brown, Out of office
today. Left message.
WETS averaging 30 gallons per day.
Checked system to on detection and
collection numbers. As of yesterday,
1/22 cell has taken 59,028 truck
yards. Estimated then volume is likely
estimated at 50,000 cubic yards
compacted. Survey probably done when
CS-F excavation complete.

0945 Picture of cell from SW ramp facing
NE. Picture of cell from SE
ramp facing N.

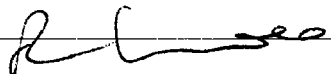
1020 Erik back at trailer. Maverick
and Golder to begin sampling three
points in CS-F. T8, T9, & T12.

1050 T-8 sampling began. Picture of Erik
& Rich pulling edge sample. Picture looking
S. at site.

1058 T-9 sampling began. Picture of sampling
transect.

1103 T-12 sampling begun.

1115 Observe sampling containerization

1145 Off site 

1/25/02 Sunny 30°F

0930 RAC onsite. Had call @ 0845 from
Richard that last 2 sample points
in CS-F are ready; they would like to
pull them. Scheduled for 1000 - T10, T11.
Erik & Rich in CS-B doing GPS work.
Out at 0945.

1010 Mob to observe sampling at T10, T11.

Too slick for GPS today

1020 Start T10 sampling event

Picture of Erik sampling T10

1028 Start T11 sampling event

Picture of Rich sampling T11

1034 Done w/ sampling events.

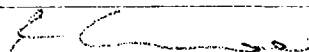
For Erik, Sandra was on site yesterday.

She addressed stockpiling of material
on bank of creek in CS-F. Brought
up issues of having plastic down
under stockpiles. On site 1200 to 0800.

Kevin onsite to speak with John.

No trucks were hauling yesterday due
to muddy material.

1200 off site



1/28/02 Sunny 65°F

1145 RAC on site. With weather approaching Wed/Thurs, - it appears as if today and tomorrow will be the only work days. Won't get to pump station area until next week.

1305 Spoke with John about forwardly WTS information to Kevin. Kevin is aware that modifications did not occur. John was going to remove sand filter; carbon unit but because results came back elevated - nowack decided to keep system intact.

1415 Picture of cell from SE ramp & area where stockpile was.

Picture of cell from SE ramp facing west of CSF stockpiled material.

1530 Off site

[Signature]

2/1/02 Partly Cloudy 30°F

1100 RAC on site. No operation today.

Richard @ Golder office. Erik on site, but sick - only mechanics working. Received 2 min so work in CSF may be slow next week. moving stockpiles - pushing material in cell.

1135 Picture from S entrance on bay of CSF. Very muddy. Access limited.

1230 RAC off site

[Signature]

3/4/02 Sunny 25°F

0955 PAC onsite. Hauling sediment today.

Estimated 20 loads to complete CS-F.

Operation will transfer to the area around the pump station - possibly more south of end point at CS-F.

~~(PAC) 643 trucks in for 52,285 truckloads.~~

As of 1/25 61,305 truck yards.

1105 Off to left for loan to meet Kevin Turner.

As Dead Creek winds down - may need to spend less time at sight. At end of project, needs to do better report for now do PULREP. Time?

1120 Off site - left for

1125 At Dead Creek. Observed truck unloading in cell. Stockpiled material in SW section of cell being moved.

1140 Observed truck being loaded in CS-F.

1145 Picture of excavator clearing stockpiled sediment.

1150 Off site for lunch.

1215 Onsite. Talked to John about schedule. Area near pump station the blanked today should finish tomorrow to sample. Cider scheduled for placement in CS-B being planned, but no firm date. Survey

2/4/02 (cont.)

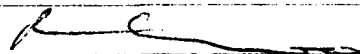
to be scheduled soon within next two weeks.

1255 observed truck loading - clearing along bank. Equipment being moved to area around pump station.

1330 Spoke to Rich about sampling tomorrow.

He will contact me with timeframe.

1400 Off site

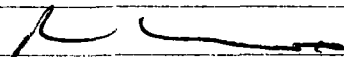


2/6/02

0730 Spoke with Rich & Collier, Maverick has an opportunity to go ahead on the sampling for area near pump station. I authorized getting the sample without oversight. Rich will provide pictures.

1215 RAC on site. John explained that operations are winding down - just moving rip-rap in CS-E & demobilizing. I will be at site tomorrow, 2/7/02 for photo. to discuss briefly upcoming events.

1300 off site.



2/28/02 Sunny 35°F

1100 RAC onsite. 6 mil fabric being placed on cell. Maverick sewing entire length of seam. Should have about half of cell covered today - remainder tomorrow. Picture of cell from SE ramp facing NW. Picture of cell from SE ramp facing N. Picture of cell from W berm facing E. Picture of cell from NW corner of sump area - tier facing SE.

1200 off site.



8/1/82 ^(6:00) Sunny Partly Cloudy 45°F

1050 POC on site. Wind has
picked up substantially. Having
problems laying down plastic
liner over geomembrane.

Pictures of crew handling plastic.
1215 off site.

[Signature]

APPENDIX B

PHOTOGRAPHIC LOG

(55 Pages)

(Original photographs and negatives are on file at the Tetra Tech EM Inc. START office)



OFFICIAL PHOTOGRAPH NO. 1
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Rough grading of the TSCA cell site.

Location: Dead Creek Sediment Removal Site
 Sauget, St. Clair County, Illinois

Orientation: West

TDD Number: S05-0104-010

Date: April 11, 2001

Photographer: Art Currier, Tetra Tech EM Inc. (TtEMI)

Witness: None



OFFICIAL PHOTOGRAPH NO. 2
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: View of Site M access road with end of Walnut Street and residences in the background.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: East

TDD Number: S05-0104-010

Date: April 11, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 3
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Segment B adjacent to the TSCA cell site.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: North

TDD Number: S05-0104-010

Date: April 11, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 4
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: The creek dewatering system just downstream from Judith Lane.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: Northeast

TDD Number: S05-0104-010

Date: April 11, 2001

Photographer: Art Carrier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 5
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Sediment trap at Judith Lane.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

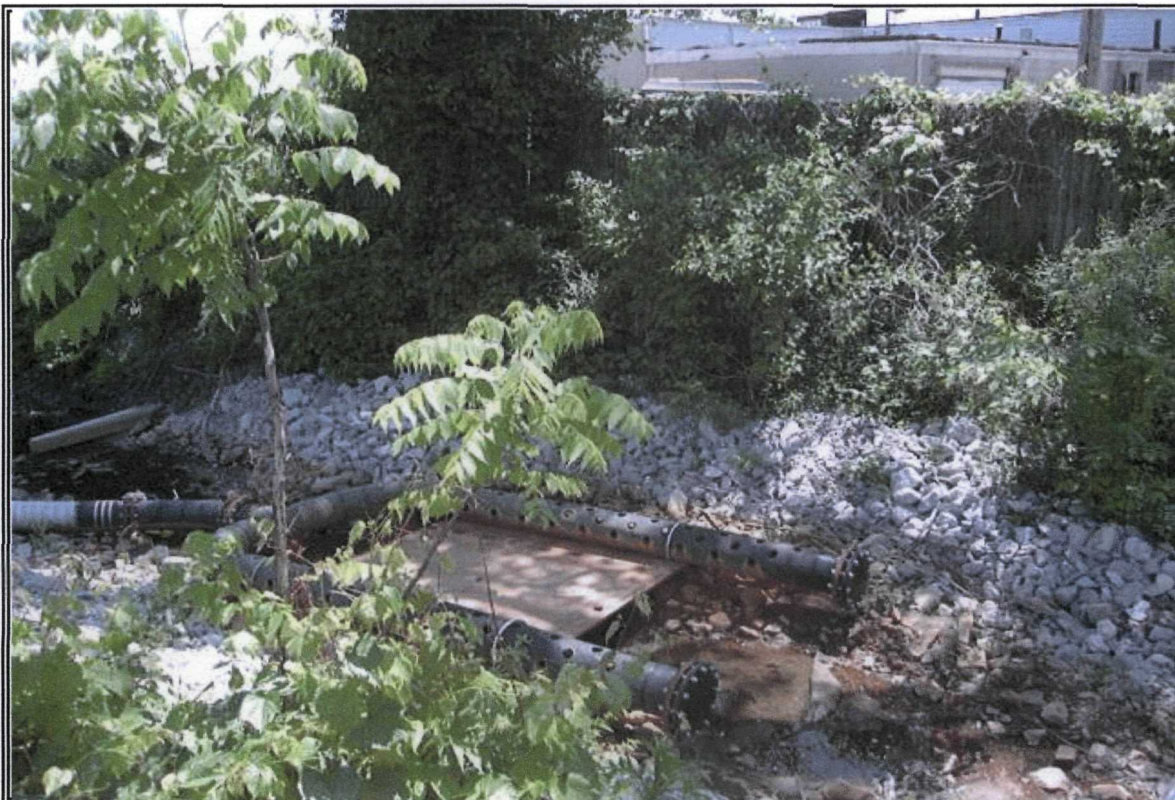
Orientation: Northeast

TDD Number: S05-0104-010

Date: April 11, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 6
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Flow dissipater at the end of the creek dewatering system.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: South

TDD Number: S05-0104-010

Date: May 8, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 7
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Dewatering Site M.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

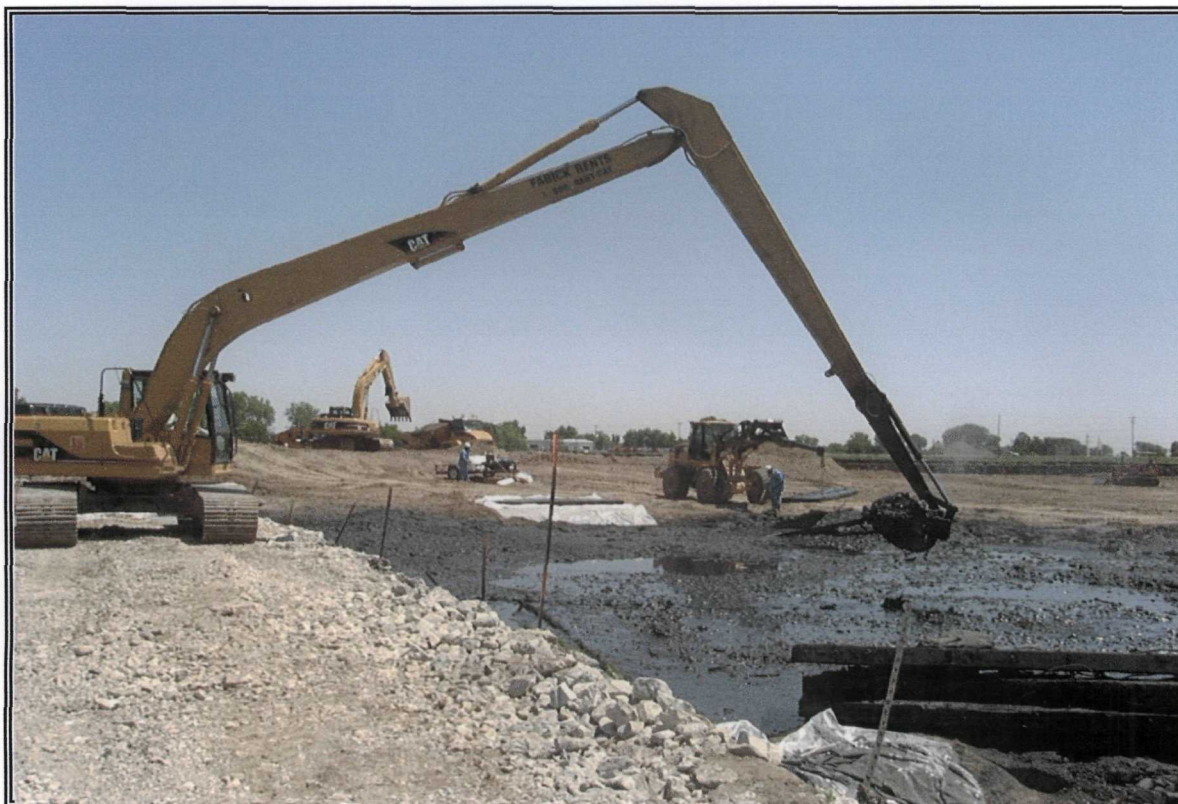
Orientation: East

TDD Number: S05-0104-010

Date: June 13, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 8
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Removing sediment from Site M with a longstick backhoe.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: Northeast

TDD Number: S05-0104-010

Date: July 13, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 9
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Site M after the removal was completed and clean fill was placed in the excavation.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: East

TDD Number: S05-0104-010

Date: July 13, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 10
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: The secondary liner geotextile layer.

Location: Dead Creek Sediment Removal Site
 Sauget, St. Clair County, Illinois

Orientation: Northwest

TDD Number: S05-0104-010

Date: July 26, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 11
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Cleaning the culvert passing under Highway 157.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: Southwest

TDD Number: S05-0104-010

Date: July 30, 2001

Photographer: Art Carrier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 12
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Deployment of GCL layer in the secondary liner.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: East

TDD Number: S05-0104-010

Date: August 1, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 13
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Overlap between GCL rolls in the secondary liner.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: East

TDD Number: S05-0104-010

Date: August 1, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 14
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Deployment of geomembrane layer over the GCL in the secondary liner.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: Northwest

TDD Number: S05-0104-010 **Date:** August 1, 2001

Photographer: Art Currier, TtEMI **Witness:** None



OFFICIAL PHOTOGRAPH NO. 15
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Welding the seam between two geomembrane rolls in the secondary liner.

Location: Dead Creek Sediment Removal Site
 Sauget, St. Clair County, Illinois

Orientation: South

TDD Number: S05-0104-010

Date: August 1, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 16
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Air testing a geomembrane seam in the secondary liner.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: Southwest

TDD Number: S05-0104-010

Date: August 2, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 17
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Geomembrane layer of the secondary liner covering most of the cell.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: Southwest

TDD Number: S05-0104-010

Date: August 6, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 18
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Portion of Segment D with contaminated sediment removed.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

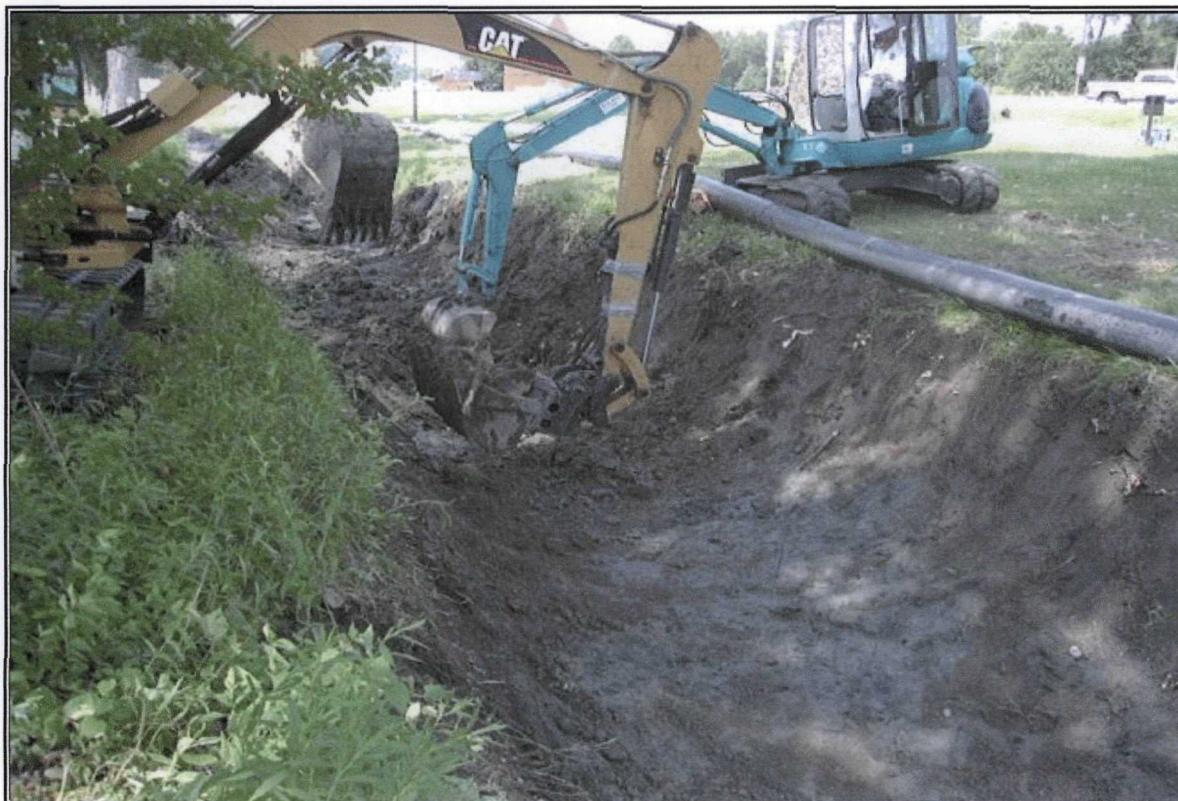
Orientation: North

TDD Number: S05-0104-010

Date: August 8, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 19
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Sediment being removed from Segment E near the intersection of Highways 3 and 157.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: West

TDD Number: S05-0104-010

Date: August 8, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 20
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Partial coverage of the Geonet layer in the secondary liner.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: South

TDD Number: S05-0104-010

Date: August 9, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 21
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Installation of the second layer of geotextile in the secondary liner.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: Northwest

TDD Number: S05-0104-010

Date: April 10, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 22
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Construction of the bermed liner for the wastewater treatment system.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: East

TDD Number: S05-0104-010

Date: August 17, 2001

Photographer: Joe Parish, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 23
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Placing fill material over the secondary liner.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: Northwest

TDD Number: S05-0104-010

Date: August 20, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 24
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Placing holding tanks in the wastewater treatment berm.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: Northeast

TDD Number: S05-0104-010

Date: August 21, 2001

Photographer: Art Carrier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 25
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Sump riser pipe in the northwest corner of the cell.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: Northeast

TDD Number: S05-0104-010

Date: August 21, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 26
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Installation of a 25-foot deep groundwater monitoring well near the northwest corner of the cell.

Location: Dead Creek Sediment Removal Site
 Sauget, St. Clair County, Illinois

Orientation: Northwest

TDD Number: S05-0104-010

Date: August 23, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 27
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Covering the cell with geomembrane.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: Northwest

TDD Number: S05-0104-010

Date: August 23, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 28
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Cell construction showing various layers of the primary liner.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: Northeast

TDD Number: S05-0104-010

Date: August 29, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 29
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Screening sediment that is stockpiled in Segment B.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: Southeast

TDD Number: S05-0104-010

Date: September 6, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 30
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Placing sand on top of the primary liner and securing the anchor trench on the west slope of the cell.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: North

TDD Number: S05-0104-010

Date: September 7, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 31
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Collection sump located in the northwest corner of the cell.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: North

TDD Number: S05-0104-010

Date: September 10, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 32
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Removal activities in Segment E between Edgar Street and Jerome Lane.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: North

TDD Number: S05-0104-010

Date: September 13, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 33
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Completed sand layer on top of the liner.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: Northeast

TDD Number: S05-0104-010

Date: September 19, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 34
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Access ramp on the southeast corner of the cell.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: Southwest

TDD Number: S05-0104-010

Date: September 24, 2001

Photographer: Art Currier, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 35
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: First load of screened sediment is dumped into the cell from the southeast ramp.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: Northeast

TDD Number: S05-0104-010 **Date:** September 26, 2001

Photographer: Art Currier, TtEMI **Witness:** None



OFFICIAL PHOTOGRAPH NO. 36
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Placing sediment along the toe of the east slope of the cell.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: South

TDD Number: S05-0104-010

Date: September 27, 2001

Photographer: Tom Binz, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 37
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Completed removal in Segment E north of Kinder Street.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: North

TDD Number: S05-0104-010

Date: October 8, 2001

Photographer: Tom Binz, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 38
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Excavation of Segment B adjacent to Queeny Avenue.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: West

TDD Number: S05-0104-010

Date: October 22, 2001

Photographer: Tom Binz, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 39
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Removal of stockpiled material from Segment B.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: Northwest

TDD Number: S05-0104-010

Date: October 25, 2001

Photographer: Tom Binz, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 40
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Technician removing material from around the "overflow" pipe located in the west slope of Segment B just south of Queeny Avenue.

Location: Dead Creek Sediment Removal Site
 Sauget, St. Clair County, Illinois

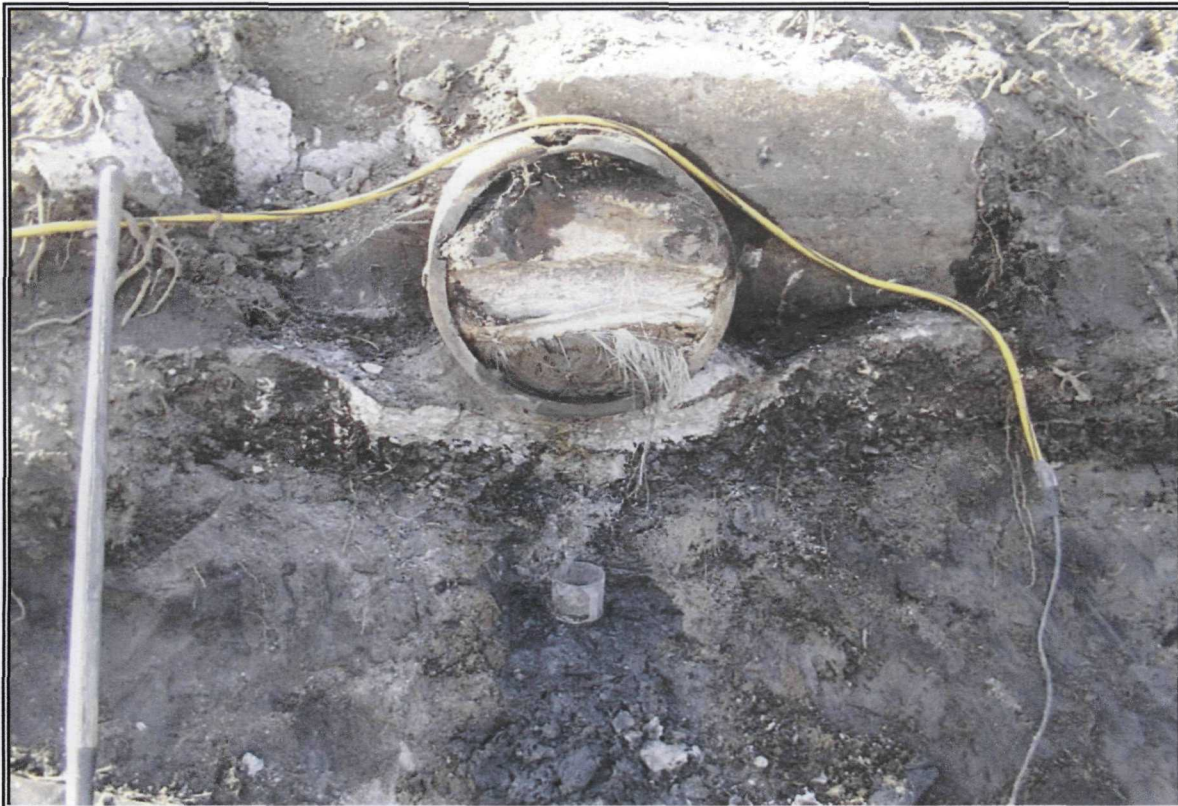
Orientation: West

TDD Number: S05-0104-010

Date: October 27, 2001

Photographer: Tom Binz, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 41
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Material partially plugging the end of the "overflow" pipe.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: West

TDD Number: S05-0104-010

Date: November 3, 2001

Photographer: Tom Binz, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 42
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Collecting a sample of the discharge from the "overflow" pipe.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: West

TDD Number: S05-0104-010 **Date:** November 3, 2001

Photographer: Tom Binz, TtEMI **Witness:** None



OFFICIAL PHOTOGRAPH NO. 43
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Installation of concrete and bentonite plug in the mouth of the "overflow" pipe.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: Southwest

TDD Number: S05-0104-010 **Date:** November 7, 2001

Photographer: Tom Binz, TtEMI **Witness:** None



OFFICIAL PHOTOGRAPH NO. 44
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Sediment removal from Segment C just south of Judith Lane.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: South

TDD Number: S05-0104-010

Date: November 8, 2001

Photographer: Tom Binz, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 45
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Completed plug in the mouth of the "overflow" pipe.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: West

TDD Number: S05-0104-010

Date: November 9, 2001

Photographer: Tom Binz, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 46
U.S. ENVIRONMENTAL PROTECTION AGENCY

<u>Subject:</u>	<u>Southern portion of Segment B with geotextile blanket installed.</u>		
<u>Location:</u>	<u>Dead Creek Sediment Removal Site</u> <u>Sauget, St. Clair County, Illinois</u>		
<u>Orientation:</u>	<u>South</u>		
<u>TDD Number:</u>	<u>S05-0104-010</u>	<u>Date:</u>	<u>November 9, 2001</u>
<u>Photographer:</u>	<u>Tom Binz, TtEMI</u>	<u>Witness:</u>	<u>None</u>



OFFICIAL PHOTOGRAPH NO. 47
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Dumping fly ash in the cell to reduce overall moisture content of material.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

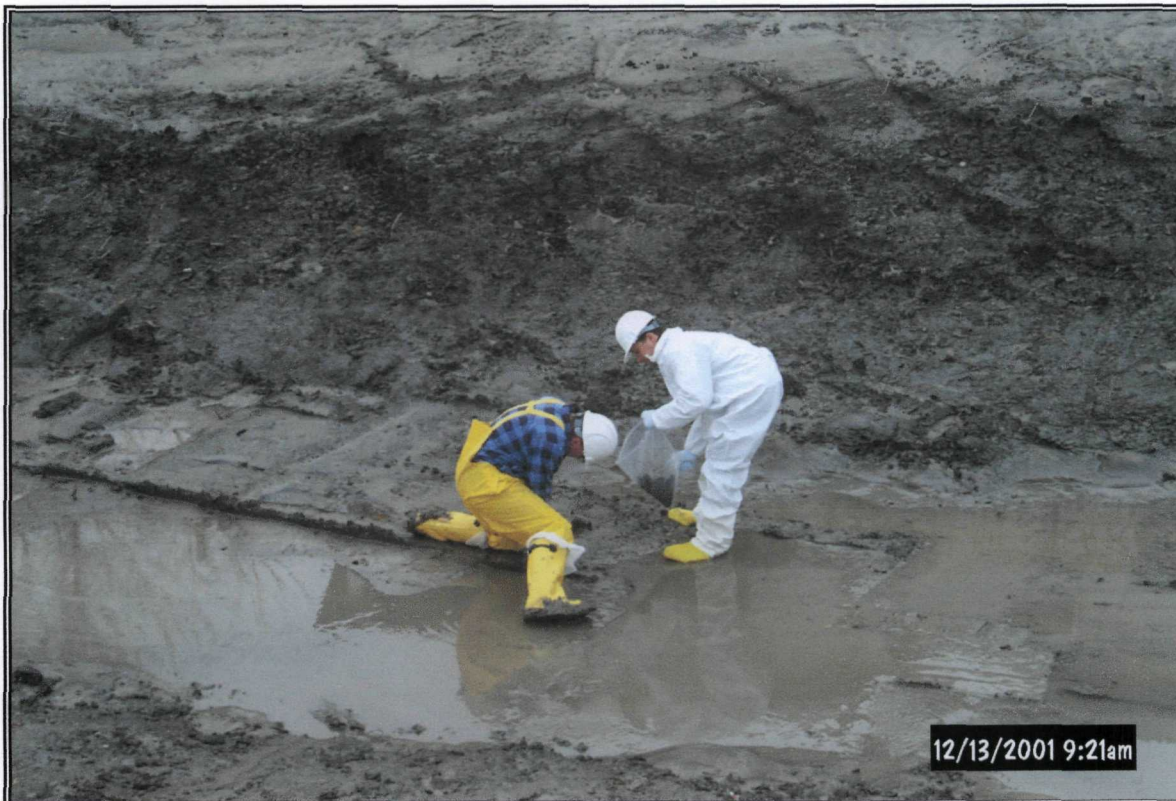
Orientation: East

TDD Number: S05-0104-010

Date: November 12, 2001

Photographer: Ron Carroll, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 48
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Confirmation sampling in the creek bed.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: West

TDD Number: S05-0104-010

Date: December 13, 2001

Photographer: Ron Carroll, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 49
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Nearly full cell.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: Northeast

TDD Number: S05-0104-010

Date: January 8, 2002

Photographer: Ron Carroll, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 50
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Wastewater treatment system winterization system.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: Northeast

TDD Number: S05-0104-010

Date: January 10, 2002

Photographer: Tom Binz, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 51
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Discolored water in Segment F upstream from the dogleg.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

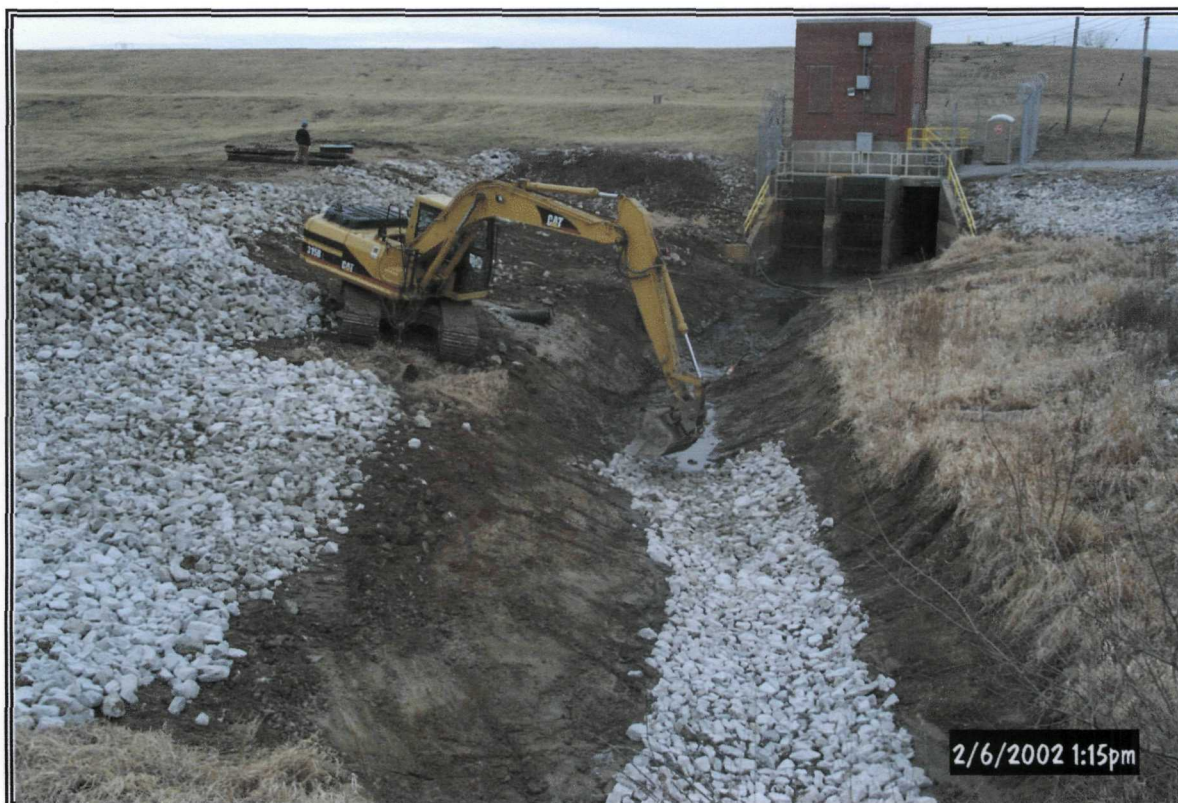
Orientation: South

TDD Number: S05-0104-010

Date: January 22, 2002

Photographer: Ron Carroll, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 52
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Placing cobble in the excavation in Segment F near the pump station.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: West

TDD Number: S05-0104-010

Date: February 6, 2002

Photographer: Ron Carroll, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 53
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Northwest corner of cell showing the top of the sump and the discharge hose.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: East

TDD Number: S05-0104-010

Date: February 13, 2002

Photographer: Ron Carroll, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 54
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Placing the geomembrane cover over the sediment.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: East

TDD Number: S05-0104-010

Date: February 28, 2002

Photographer: Ron Carroll, TtEMI

Witness: None



OFFICIAL PHOTOGRAPH NO. 55
U.S. ENVIRONMENTAL PROTECTION AGENCY

Subject: Placing poly over the geomembrane layer in the temporary cover.

Location: Dead Creek Sediment Removal Site
Sauget, St. Clair County, Illinois

Orientation: Northwest

TDD Number: S05-0104-010

Date: March 1, 2002

Photographer: Ron Carroll, TtEMI

Witness: None

APPENDIX C
TABLE OF WITNESSES
(One Page)

TABLE OF WITNESSES

Dead Creek Sediment Removal
Sauget, St. Clair County, Illinois

Mr. Kevin Turner
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U.S. Environmental Protection Agency
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